

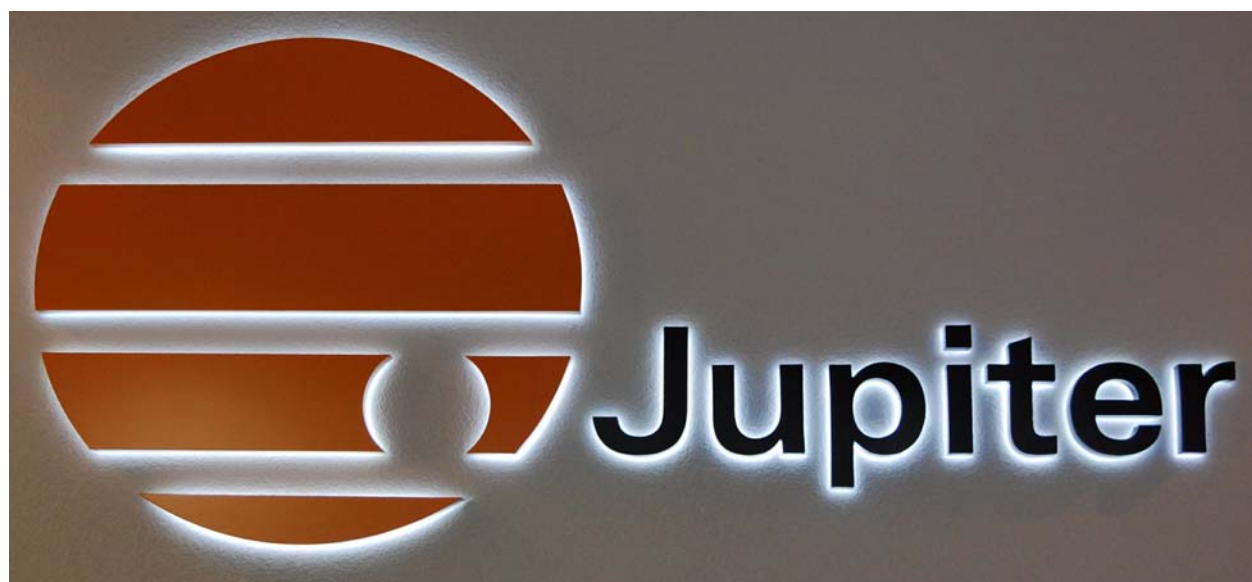
Jupiter Systems

ControlPoint Software Manual

2.11



March 28, 2013
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Using this Manual

Using this Manual

Introduction

Chapter titles are at the top of every page to assist you in finding sections.

The Table of Contents is a section, chapter, and heading outline of the manual; whereas, the comprehensive index at the end of the manual guides you through a search of subjects, figures, and tables.

Note and Caution

This manual uses three special entries to get your attention:

- Note
- Caution
- Warning

These entries are listed in their ascending order of importance. The examples shown are found throughout this manual.

Note	Notes are entries that bring your attention to specific items that you must see, read, and understand before continuing.
-------------	--

Caution	Cautions are entries that alert you to items that may cause the system to not operate properly. For instance, tasks that were either done out of sequence or not supposed to be done at all may cause the system to malfunction. Cautions also alert you about physical connections that can cause the system to not operate properly.
----------------	--

Warning	Warnings are entries that bring to your attention items that may physically damage the system.
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Chapter 1—Introduction

1. Introduction

ControlPoint™ (CP) gives you the capability of controlling all Display Wall windows from a single interface that can be used both locally and remotely. The remote or local control capabilities of ControlPoint allow you to control your Display Wall from the desktop of the Display Controller itself, as well as from remote consoles in your display room.

1—Introduction

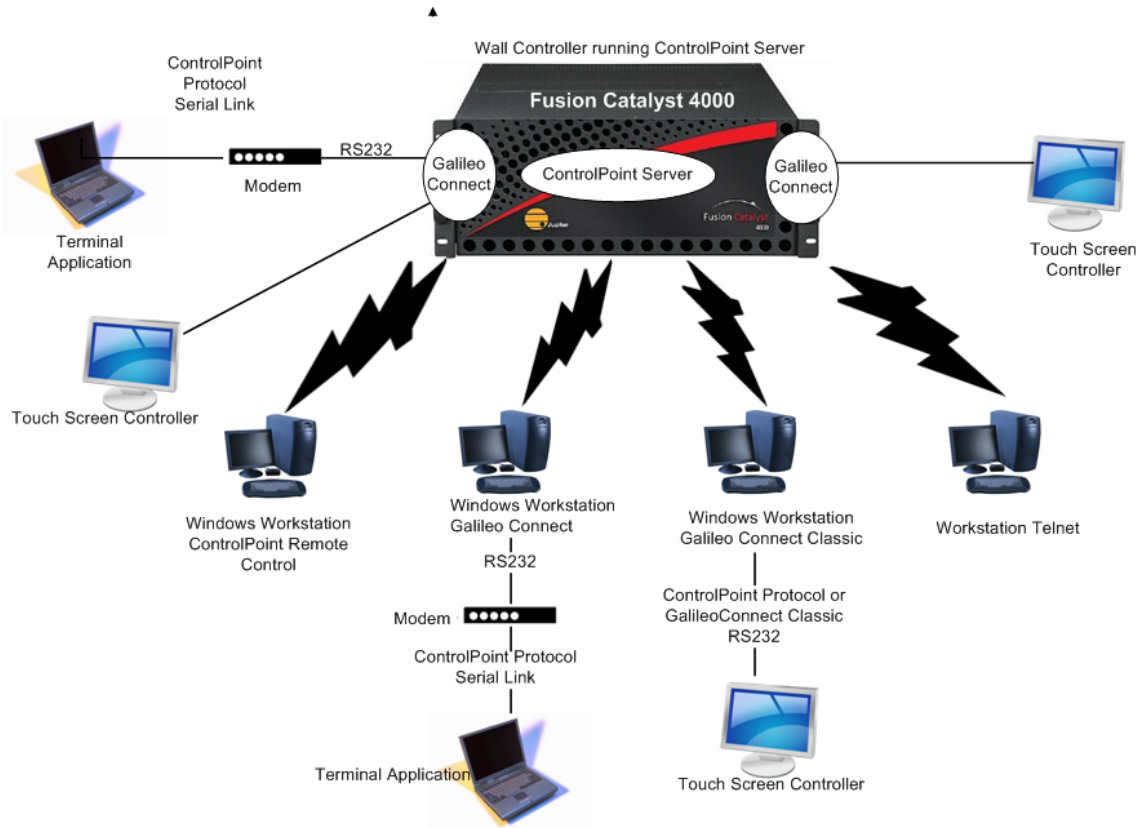


Figure 1 - ControlPoint

1.1 ControlPoint Overview

ControlPoint is a client/server **pair** that work together over your network (or locally on the Wall Controller) to allow complete control and manipulation of your windows. The server is part of the ControlPoint Software installed on your Wall Controller System. The client software must be installed on every workstation that will have control of windows that are open on your Display Wall.

A Wall Controller may be connected to and controlled by more than one workstation, but not at the same time.

A single workstation may run multiple instances of ControlPoint and connect to and control multiple Wall Controllers.

ControlPoint Overview

The current screen configuration of all open windows is saved when the system goes through normal shut down procedures. Upon restarting, this configuration will be loaded and all windows will be re-opened.

1.1.1 System Windows Awareness and Control

ControlPoint tracks all open windows. The user can move, resize, minimize, restore, and change the order of all system windows.

1.1.2 The Properties Dialog-Box

The dialog-box features **Apply** and **Cancel** buttons outside the property pages. These buttons apply to whatever page is currently active. Switching pages automatically attempts to apply the changes, but should it fail, the page remains active and in edit mode. You can leave the page by either successfully applying the changes or canceling the edits (with the **Cancel** button).

Some controls are immediate so that the user does not have to click the **Apply** button to apply changes from that control. Most of the spin controls, radio buttons and list-boxes are controls that can be immediately applied. Edit boxes set the dialog in edit mode when you start typing. You can then switch between edit controls and entering data, completing the transaction by clicking the **Apply** button. If you click on an immediate apply control while in edit mode the dialog-box will try to apply the changes you have made up to that point.

1.1.3 Window Properties in the Status-Bar

The status-bar displays basic attributes of the currently selected window – the window title, window type (Video, DVI or System), the position, size, and the window ID.

1.1.4 System Health in the Status-Bar

The status-bar displays the current system health (status). The status is derived from the system monitoring state and the alarms in the event log.

- Green – normal operation
- Yellow – warning
- Red – failure, immediate attention is needed.

When a new condition occurs with higher severity than the current status, the icon will blink. Once the event is acknowledged, the icon will become solid.

1—Introduction

Double clicking on the icon acknowledges the new events. Right mouse-click on the icon brings up a menu, which can activate the event log, the system monitoring dialog, or acknowledge the new events.

What ControlPoint Does

1.2 What ControlPoint Does

ControlPoint displays a simulated copy of your Display Wall on your remote system, or on the Display Wall if used locally. By moving and sizing the window icons of your DVI and Video windows within the ControlPoint window, you control the size and position of the selected window on the display wall.

ControlPoint allows full control over such parameters as channels, image balance, start, stop, and freeze, titling of window frame (if used), as well as their size and position. ControlPoint also lets you control add, delete, and hide your windows. **ControlPoint** incorporates both login security, as well as user level security.

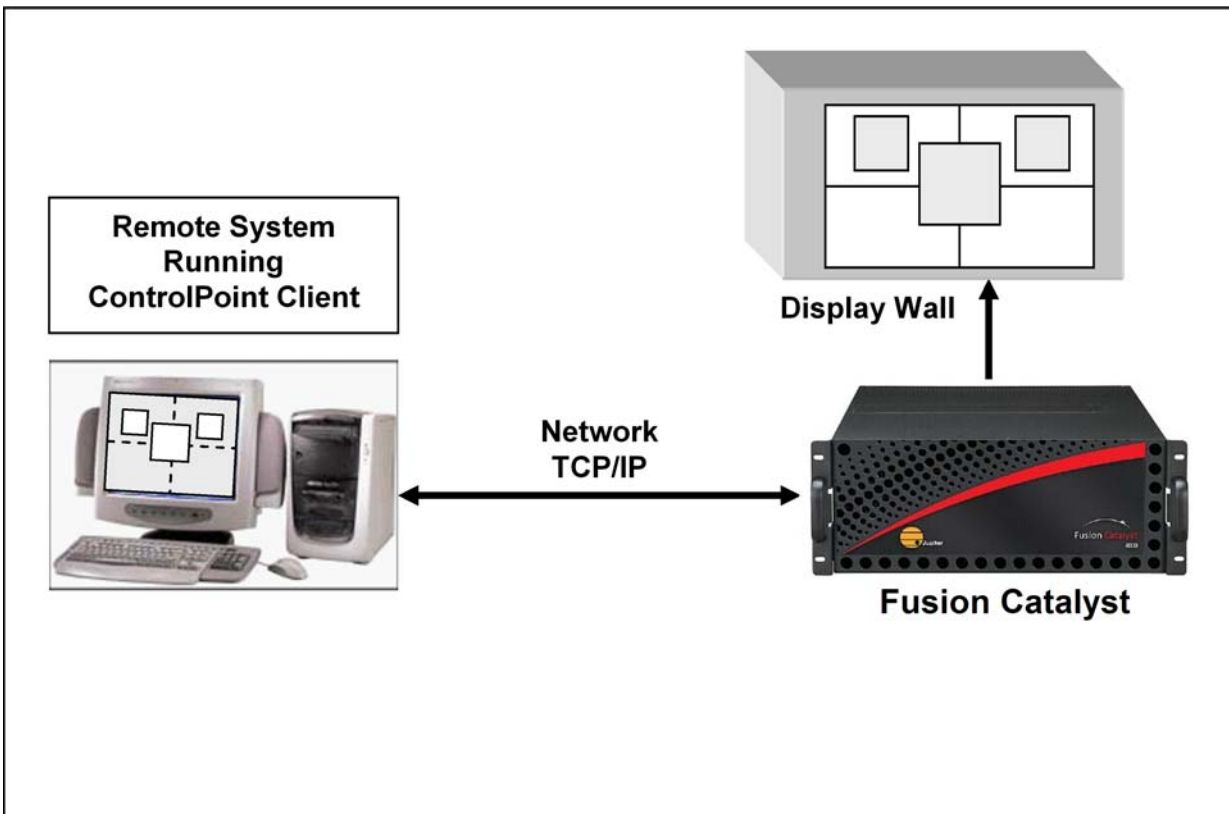


Figure 2 - ControlPoint Connection





Chapter 2—Starting ControlPoint

2. Starting ControlPoint

ControlPoint can be operated in two ways: From the **Local Controls** or from a **Client**. The icon in the **System Tray** is for the **Local Controls**. By default, start the ControlPoint Server manually.

The **Client** may also be run locally on the Wall Controller System. Install the **Client** on a Windows system (workstation) in order to use it remotely.

Note	ControlPoint Server is located in: C:\Program Files (x86)\Jupiter\ControlPoint\CPServer.exe ControlPoint Client is located in: C:\Program Files (x86)\Jupiter\ControlPoint\CPClient.exe
-------------	--

2—Starting ControlPoint

2.1 Starting the Local Controls

The **Local Controls** is started automatically when you start (or restart) the **Server**. The icon in the **System Tray** is for the **Local Controls**.

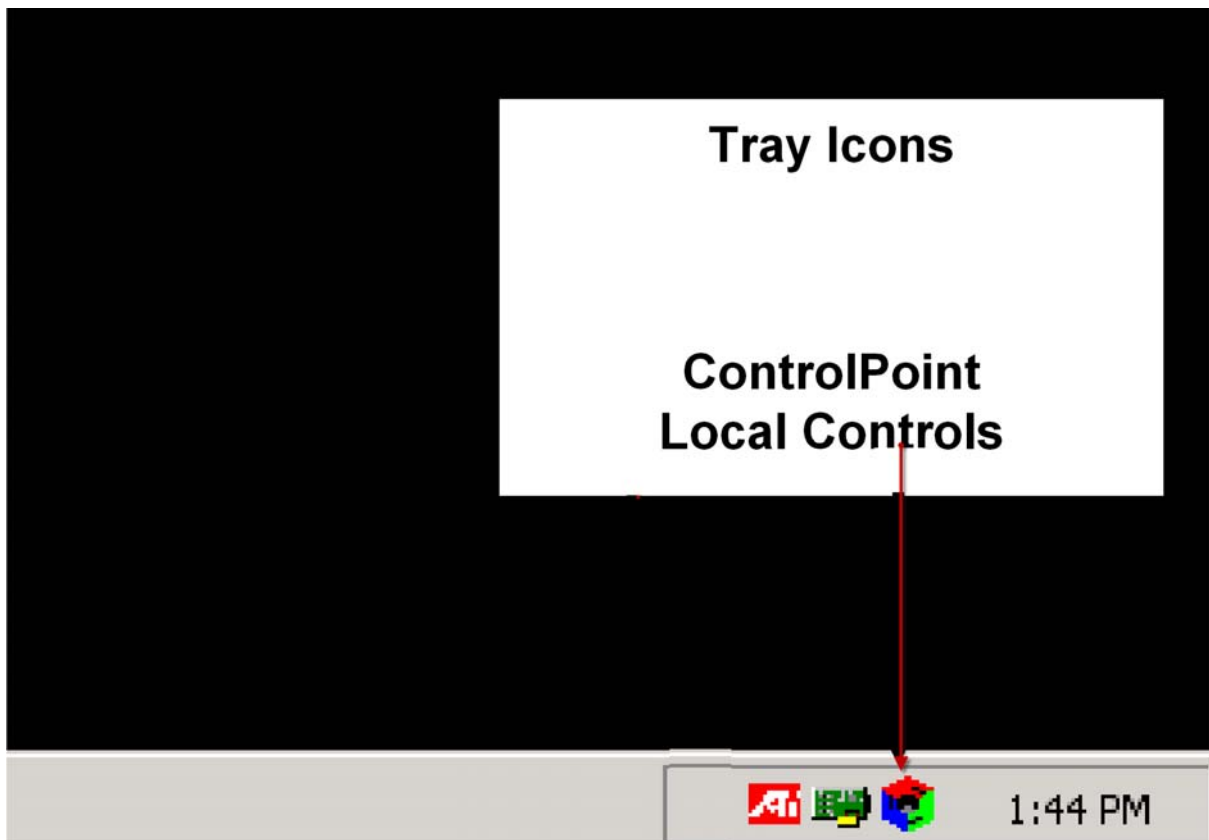


Figure 3 - Tray Icons

Starting the Local Controls

Right click on the ControlPoint Local Controls icon in the System Tray to bring up the Local Controls menu.

New Video Window	Ctrl+Alt+V
New DVI Capture Window	Ctrl+Alt+R
New CPShare Window	Ctrl+Alt+P
New IPStream Window	Ctrl+Alt+I
New VideoStream Window	Ctrl+Alt+S
New Web Window	Ctrl+Alt+B
New PictureViewer Window	Ctrl+Alt+T
New PixelNet Window	Ctrl+Alt+N
New Window with User-Assigned ID	▶
Layouts...	Ctrl+Alt+L
Window List...	Ctrl+Alt+W
System Monitoring...	
Event Log...	
About...	
Close All Windows	
Quit Server	

Figure 4 - Local Controls Menu

The items in the Local Controls Menu are discussed in following sections.

2—Starting ControlPoint

2.2 Starting the Remote Client

The ControlPoint **Remote Client** can be started from the **Start** menu. Click **Start, All Programs, Jupiter, ControlPoint, Remote Client**. You may also start the **Remote Client** and run it locally.

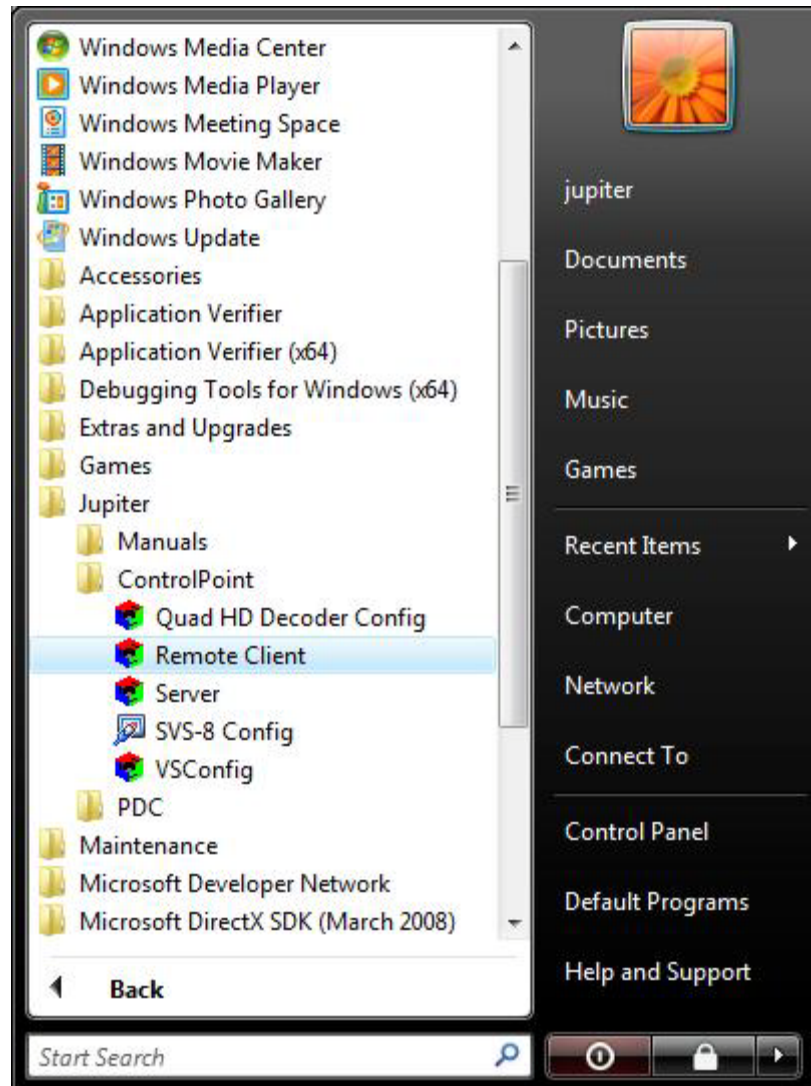


Figure 5 - ControlPoint Menu

Starting the Remote Client

When you first start the ControlPoint client, you will see the ControlPoint window with the **Connect to Server...** dialog (shown in the following page) on top of that window. Enter a login name and password to connect to the ControlPoint server. The default login name is **admin**, and there is **no** password. Click **Enter** to start the program. Setting a password for the admin user is highly recommended; refer to [“Manage Users” on page 126](#).

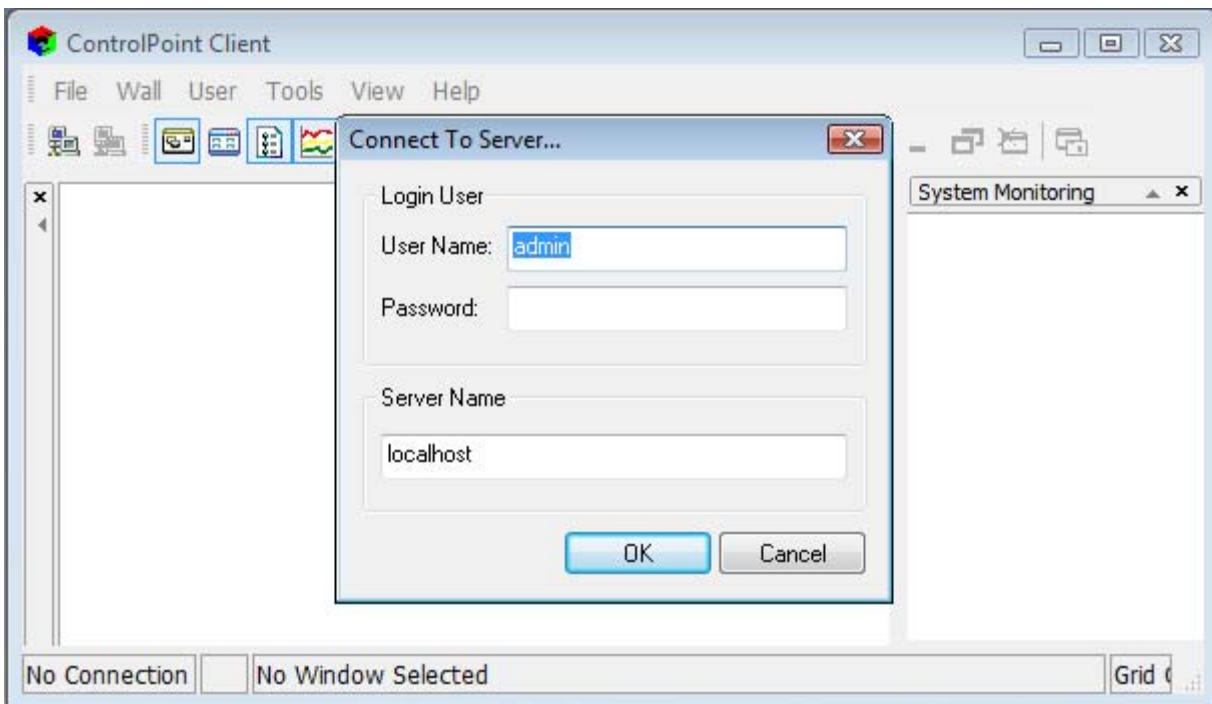


Figure 6 - Login Window

Note If you start the CP Client and see only this Connect dialog, you last closed the client when it was minimized and has opened in that same state. Restore the client from the Task Bar.

Table 1: User Name and Password

User Name	Password
admin	(none)

2—Starting ControlPoint

If you are connecting to the Wall Controller System from a remote workstation, you will need to enter a **Server Name** (the network name or IP address of the Wall Controller). If you are running the client program on your Wall Controller System leave **localhost** as shown under **Server Name**. The default **Server Name** is **localhost**. If the error message, "**No connection could be made because target machine actively refused it.**" appears, ensure that CPService is running.

If you are installing the Wall Controller on a network using DHCP and it has been configured to accept the network name of the Wall Controller, you should be able to enter this network name in **Server Name**. If this does not work, run **IPconfig** from a command window on the Wall Controller to determine its IP address and enter this in **Server Name**.

2.3 Starting the Remote Cursor

The ControlPoint **Remote Cursor** can be started from the **Start** menu. Click **Start, All Programs, Jupiter, ControlPoint, Remote Cursor**.

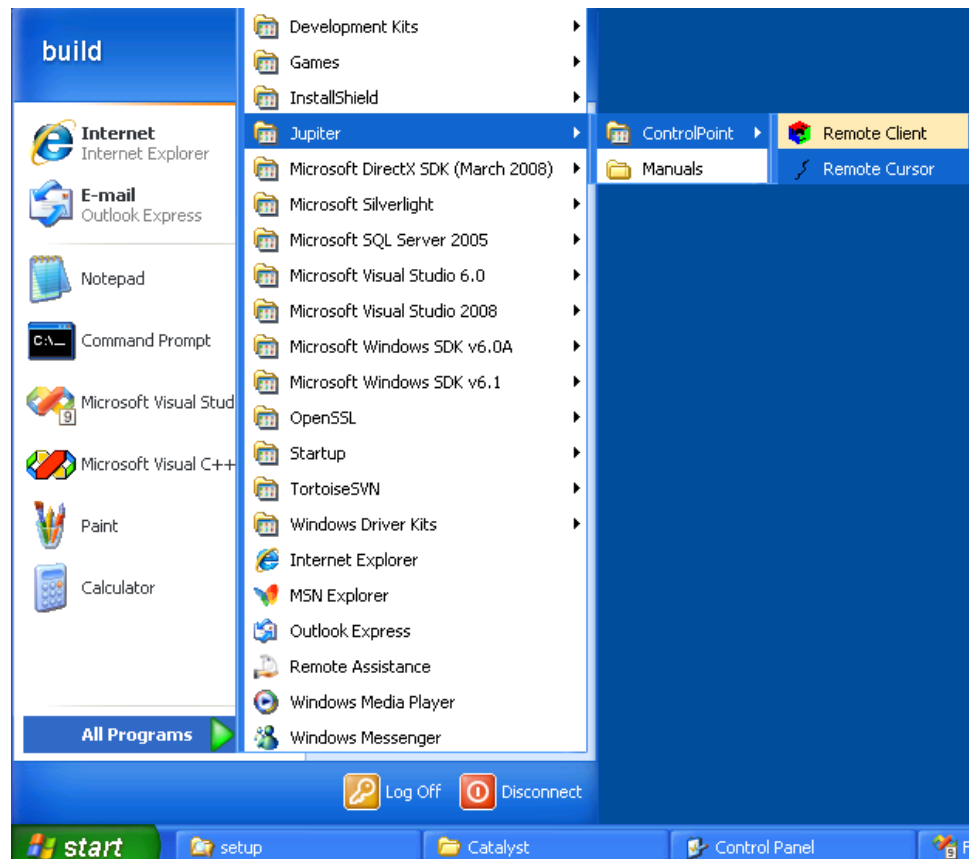


Figure 7 - Start RemoteCursor

Starting the Remote Cursor

Remote Cursor will allow you to use your local (remote Windows system) mouse and keyboard to remotely control the display as if they were the keyboard and mouse of the display Wall Controller itself.

There are four ways to activate **Remote Cursor**:

- Windows **All Programs** Menu (Jupiter/ControlPoint/Remote Client)
- **ControlPoint Remote Client**,
- Hot keys, or
- Command line.

For more information on Remote Cursor, refer to ["Remote Cursor" on page 259](#).





Chapter 3—Local Controls User Interface

3. Local Controls User Interface

There are two separate user interfaces in ControlPoint, one for the **Local Controls** and one for the **Client**. This section covers the **Local Controls** user interface, the following sections cover the **Client** user interface.

3—Local Controls User Interface

3.1 Opening the Menu

The ControlPoint **Local Controls** uses a System Tray icon for its menu. Right-click the **Local Controls** icon to bring up the menu.

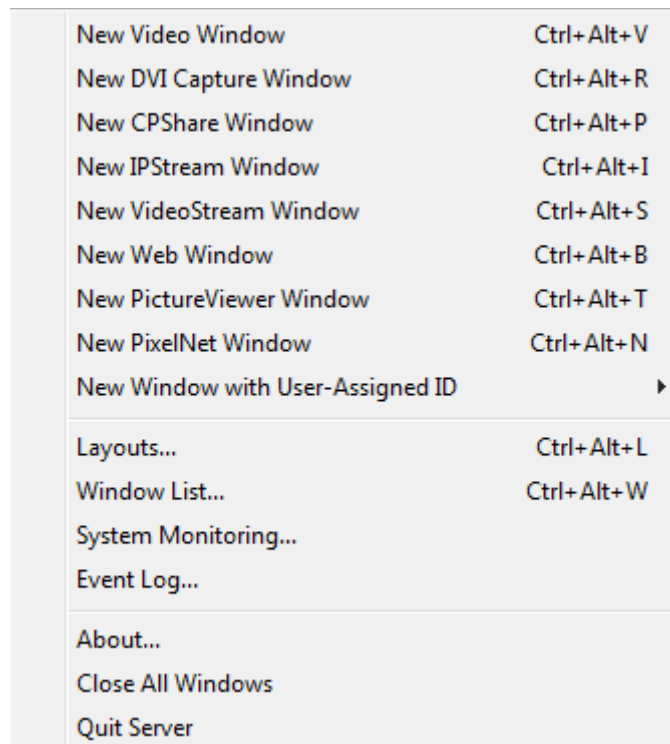


Figure 8 - Local Controls Menu with Tray

You can also open the **Local Controls** Menu with the key combination **Ctrl+Alt+M**. This will make the menu appear at your mouse cursor position anywhere on the Display Wall.

Note	You can open the Local Controls Menu with the Hot Key combination Ctrl+Alt+M . This will make the menu appear at your mouse cursor position, avoiding long mouse travels on large display walls.
-------------	---

Menu Items

3.2 Menu Items

The Local Controls has a simple menu as shown in [“Local Controls Menu with Tray” on page 16](#). The items in this menu will be described in the following sections. Note also, the keyboard commands associated with menu items.

3.2.1 New Video Window

Clicking the **New Video Window** menu item (or pressing **Ctrl+Alt+V**) will open a Video window on the desktop at position (0, 0). Video windows will always open in their native size. It is left to the operator to scale the Video window to the size needed.

3.2.2 New DVI Capture Window

Clicking the **New DVI Capture Window** menu item (or pressing **Ctrl+Alt+R**) will open a DVI window on the desktop at position (0,0). DVI windows will always be open at a **default** size of 640x480. It is left to the operator to set the DVI window to the size needed.

3.2.3 New CPShare Window

Clicking the **New CPShare Window** menu item (or pressing **Ctrl+Alt+P**) will immediately open a CPShare window on the desktop at position (0,0). Note that this window will not have content until a CPShare object is created and selected for this window. Please refer to **All Objects** for detailed information.

3.2.4 New IPStream Window

Clicking the **New IPStream Window** menu item (or pressing **Ctrl+Alt+I**) will open an IPStream window on the desktop at position (0,0). This window will not have content until an IPStream object is created and selected for this window.

3.2.5 New VideoStream Window

Clicking the **New VideoStream Window** menu item (or pressing **Ctrl+Alt+S**) will open a VideoStream window on the desktop at position (0,0). This window will not have content until a VideoStream object is created and selected for this window. VideoStream windows cannot be overlapped; therefore, when opening a VideoStream window, the system will automatically find a suitable place large enough for the window.

3—Local Controls User Interface

3.2.6 New Web Window

Clicking the **New Web Window** menu item (or pressing **Ctrl+Alt+B**) will immediately open a Web window on the desktop at position (0,0). Note that this window will not have content until a Web window object is created and selected into this window. Please refer to **All Objects** for detailed information.

3.2.7 New PictureBox Window

Clicking the **New PictureBox Window** menu item (or pressing **Ctrl+Alt+T**) will immediately open a PictureBox window on the desktop at position (0,0). Note that this window will not have content until a path to an image to be displayed has been entered. The window properties will open along with the window, allowing you to enter the path. Please refer to **All Objects** for detailed information.

3.2.8 New PixelNet Window

Clicking the **New PixelNet Window** menu item (or pressing **Ctrl+Alt+N**) will immediately open a PixelNet window on the desktop at position (0,0). Note that this window will not have content until a PixelNet input source is entered for this window. Please refer to **All Objects** for detailed information.

Menu Items

3.2.9 New Window with User Assigned ID

The **New Window with User-Assigned ID** menu item will open as a submenu for window type. After selecting the window type, the dialog shown below, will open requesting an ID number for the window.

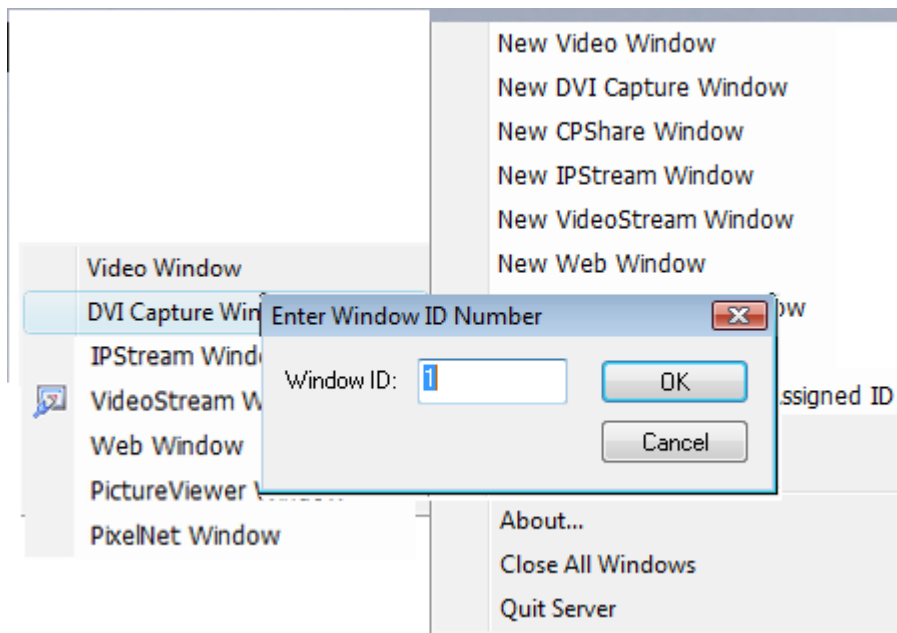


Figure 9 - Enter Window ID

Note	The window will then open as described above. Please refer to the Protocol Manual for detailed information on using User Assigned IDs.
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3—Local Controls User Interface

3.2.10 Layouts

Clicking the **Layouts** menu item (or pressing **Ctrl+Alt+L**) will open the **Layouts** dialog shown below.

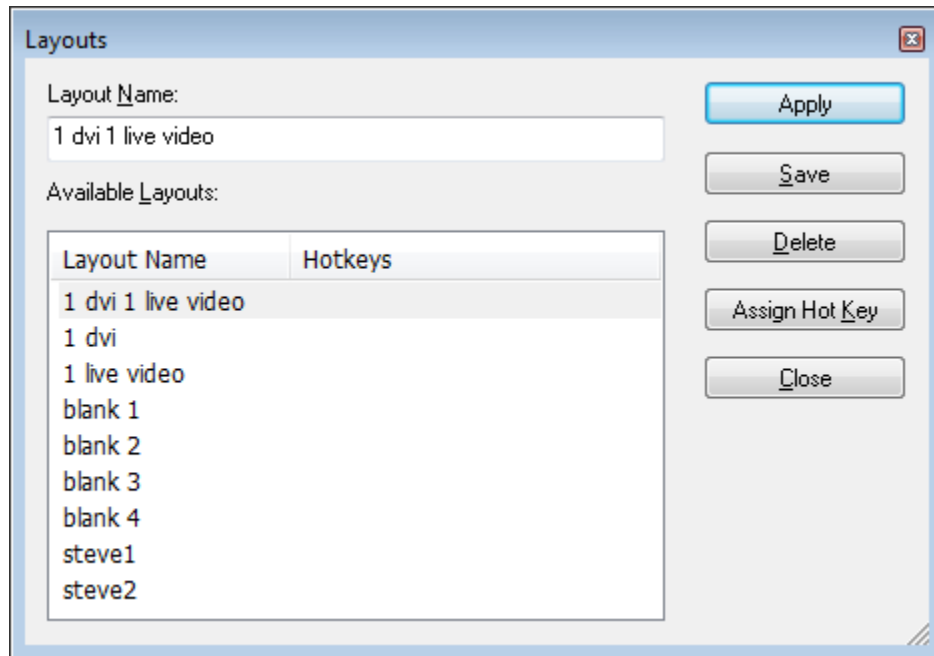


Figure 10 - Local Controls Layouts Dialog

From the dialog you can **Apply** a Layout selected from the **Available Layouts** list, **Save** a Layout, **Delete** a selected Layout, Assign a HotKey to a saved layout, or **Close** the dialog. Enter a Layout Name to save a new layout or select one to resave.

Note You must enable "**Show Hidden Files...**" option under **Folder Options** in your system to see any files used in ControlPoint.
For example, layouts are saved in **C:\Program Data\ControlPoint\ServerDataFiles\layouts**

Refer to "[5.2.10.2 Layout Event Properties](#)" for more information.

Note Layouts can also be used to restrict permissions for viewing certain parts of the wall for selected users.

Menu Items

3.2.10.1 Delete Layout

Select a layout from **Available Layouts** and click the **Delete** button to remove a layout from the list. You will get a confirmation dialog (shown below). Notice that the title bar indicates that you are using the **Local UI** (User Interface).

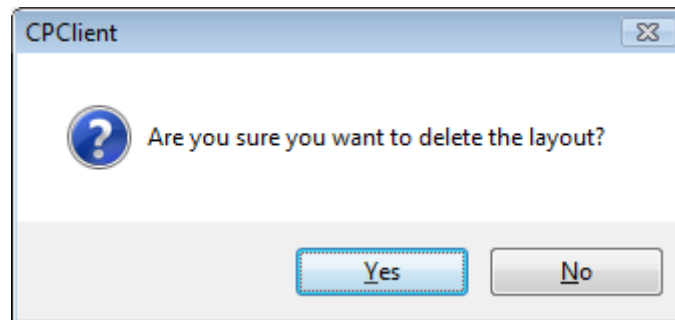


Figure 11 - Delete Layout Confirmation

3.2.10.2 Save Layout

Select a layout from the **Available Layouts** list or enter a name in the **Layout Name** box and click the **Save** button to save your layout. If you attempt to save a layout with the same name as an existing layout, or resave an existing layout, you will get the confirmation dialog show in the following figure.

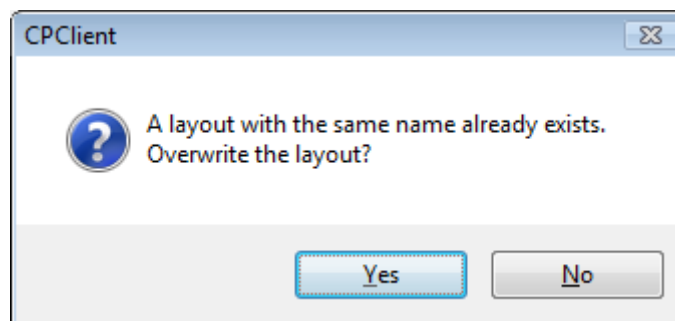


Figure 12 - Save Layout Confirmation

Layouts are saved with an xml extension on the file. This makes it a simple task to create layouts and copy them to several systems.

3—Local Controls User Interface

3.2.10.3 Assign Hot Key

Select a layout from the **Available Layouts** list and click the **Assign Hot Key...** button to bring up the Assign Hot Key dialog.

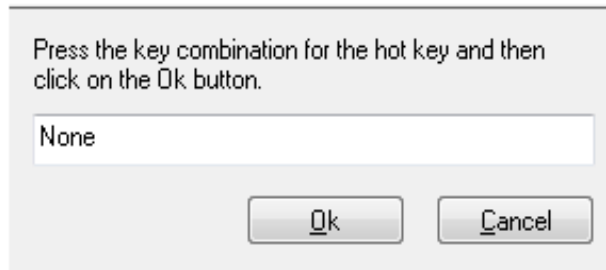


Figure 13 - Assign Hot Key Dialog

Figure 13 shows the default dialog for assigning a hot key to selected layout. Notice that the input box says **None**. If you click **OK** now, you will clear the Hot Keys assigned to the selected layout.

To assign a Hot Key press the keys that you want to use to activate the selected layout. The keystroke combination will show in the input box as you press them. This is shown in the following figure.

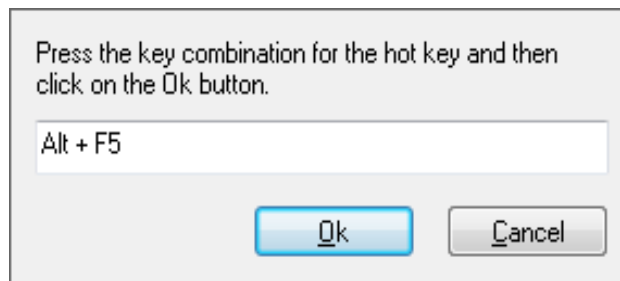


Figure 14 - Hot Key Assigned

Click **OK** to lock in the assigned **Hot Key**.

Menu Items

The following figure shows the Layout List with the illustrated layout showing the assigned hot key, **Alt+F5**.

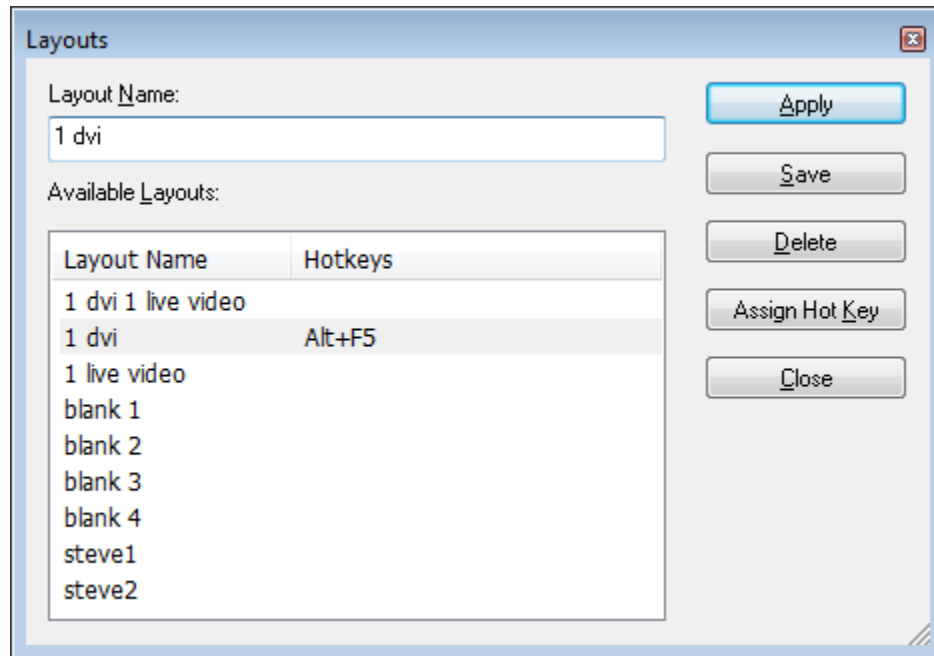


Figure 15 - Hot Key Showing in Layout List

3.2.10.4 Close Layout

The **Close** button closes the **Layouts** dialog.

3.2.10.5 Apply Layout

Select a layout from the **Available Layouts** list and click the **Apply** button to apply that layout. All existing windows and property boxes will be closed before the new layout is opened.

3—Local Controls User Interface

3.2.11 Window List

Clicking the **Window List** menu item (or pressing **Ctrl+Alt+W**) will open the **Window List** dialog shown below.

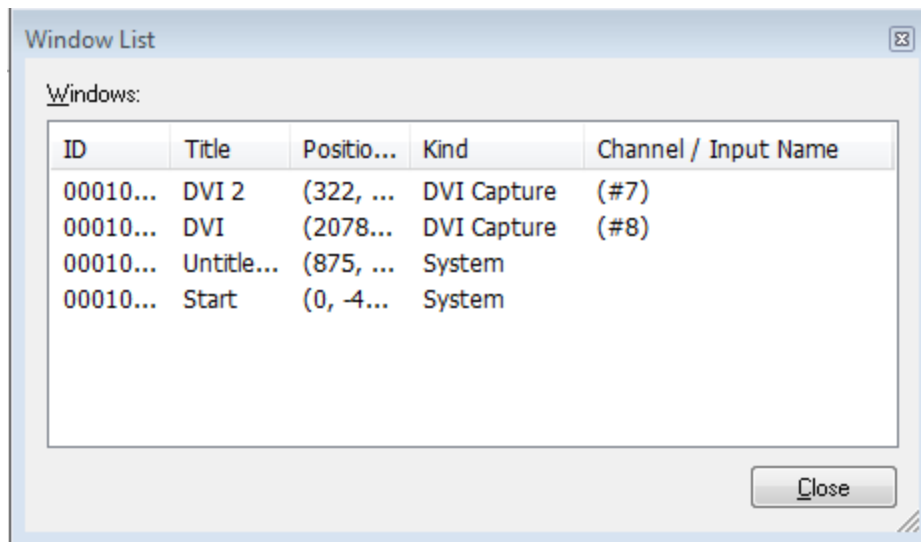


Figure 16 - Window List

Note The Local Controls Window List will display only ControlPoint Windows (e.g., DVI or Video windows) and Windows stuff.

Selecting a window in the **Window List** will also show the corresponding window in the wall mimic as selected. Conversely, selecting a window in the mimic will show the window in the Window List as selected.

Menu Items

3.2.11.1 Window List Right Click Menu

Select a window and right-click it to bring up the menu shown in **Figure 17**. You can keep track of and control all windows from one dialog if you wish. You can also bring up individual window properties.

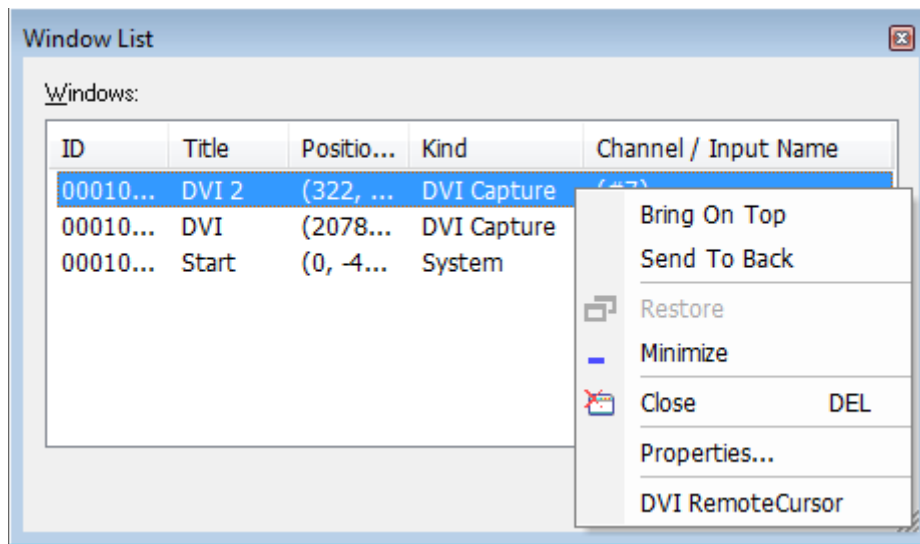


Figure 17 - Window List Right-Click Menu

3—Local Controls User Interface

3.2.12 Close all Windows

Clicking the **Close all Windows** menu item will close open windows on the desk top.

- Only windows that have a system menu can be closed with ControlPoint **Delete Window**. This excludes menus, tool tip pop-ups, and other **temporary** pop-up windows.
- Only ControlPoint windows will be closed
- Only applications registered as objects and run by that object will be closed.

Close All Windows will display the following confirmation dialog.

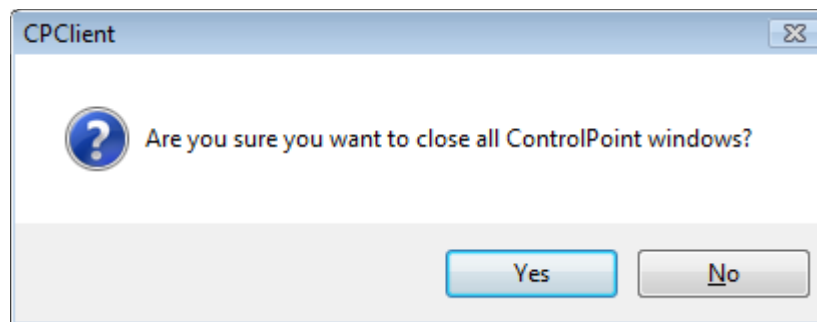


Figure 18 - Close All Windows Confirmation

3.2.13 Quit Server

Clicking the **Quit Server** menu item closes the actual **ControlPoint Server** process running on the system and ends the connection with the remote system. If selected, you will get the close server confirmation shown in the figure below. You can restart the server through the **Start** menu (refer to "[Figure 5 - ControlPoint Menu](#)").

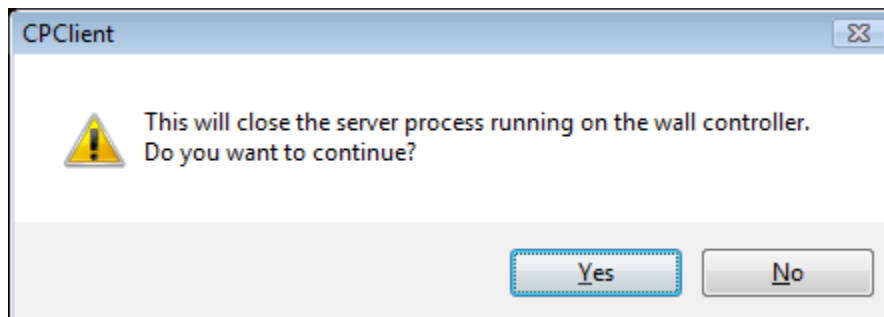


Figure 19 - Quit Server Confirmation

Opening Window Properties in Local Controls

Note Quitting the server will close all ControlPoint windows on the Display Wall.

3.3 Opening Window Properties in Local Controls

When working with the Local Controls on the Wall Controller System, you can open the properties for any window on the desktop by double clicking the image area of the respective window. You can also open Properties by right-clicking the window image and selecting **Properties** from the menu or by right-clicking the window in the Window List and selecting **Properties** from the menu.

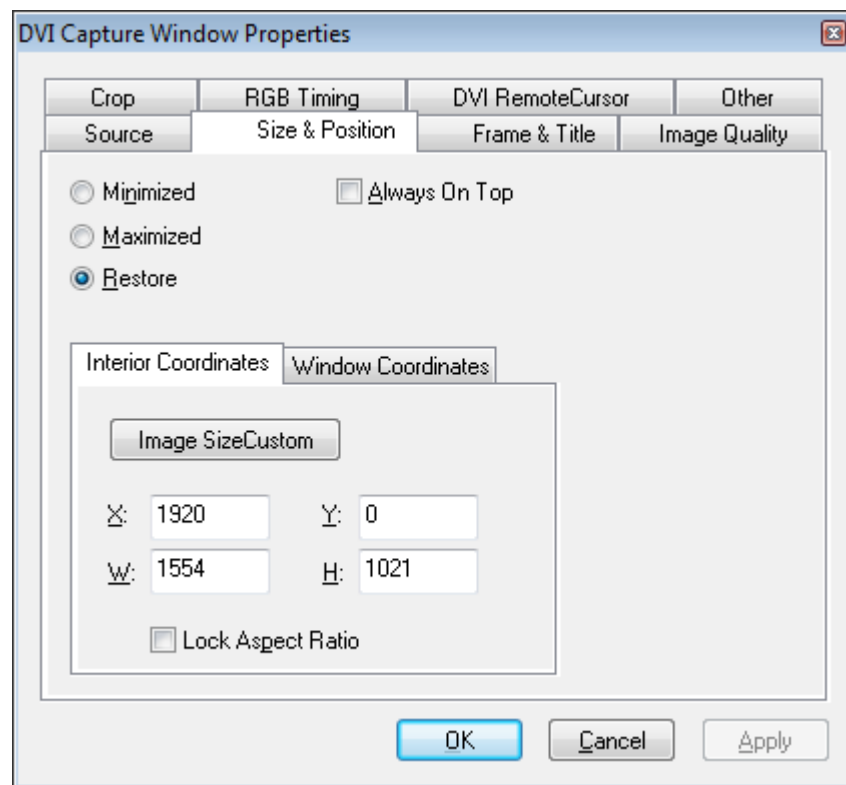


Figure 20 - Open Window Property

3—Local Controls User Interface

Please refer to [“Properties” on page 71](#) for information on using window properties.

Note	When working within the Local Interface, open separate Properties for each window.
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Note	The values for X and W must be specified as even pixels, whereas, Y and H can accommodate both even and odd values.
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Chapter 4—Client User Interface

4. Client User Interface

When you first run the ControlPoint Client, you will see a window similar to the one shown in the figure below. There are several ways to view the ControlPoint window (refer to ["Window Menu" on page 42](#) for more information on setting up how you view your ControlPoint window).

The ControlPoint window displays a scaled image of your Display Wall.

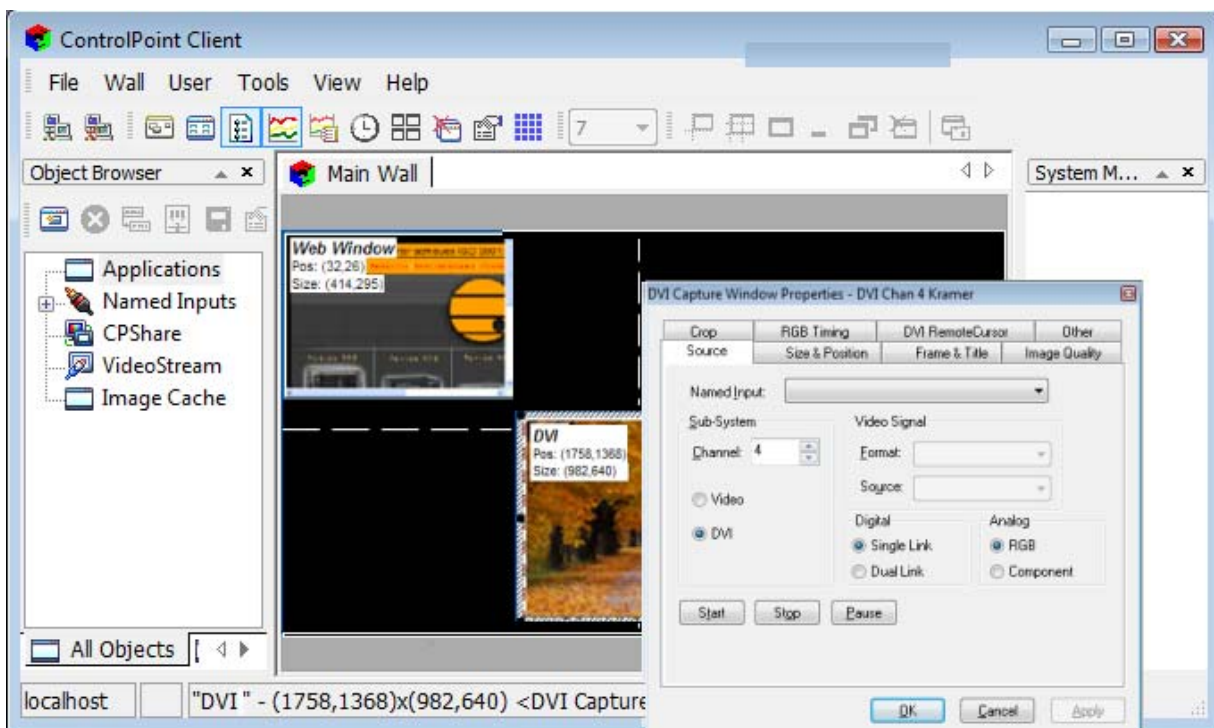


Figure 21 - The ControlPoint Window

4—Client User Interface

In the wall mimic area, note the dotted line splitting the window; this indicates that the system is set for four displays. The mimic area shows a display wall scaled into the ControlPoint window. The window icons are also scaled and show the relative size and position of the actual windows on the Display Wall. The user can simplify control of windows by titling them with meaningful names.

4.1 Menus

There are five viewable menu areas within the ControlPoint Client

- Menu Bar
- Tool Bar
- Wall Mimic background context
- Window context
- Status Bar context

4.1.1 Menu Appearance

Menus are context sensitive and reflect whether a window icon is selected or not. In the following figure, the display reads **No Window Properties** because no window is selected.

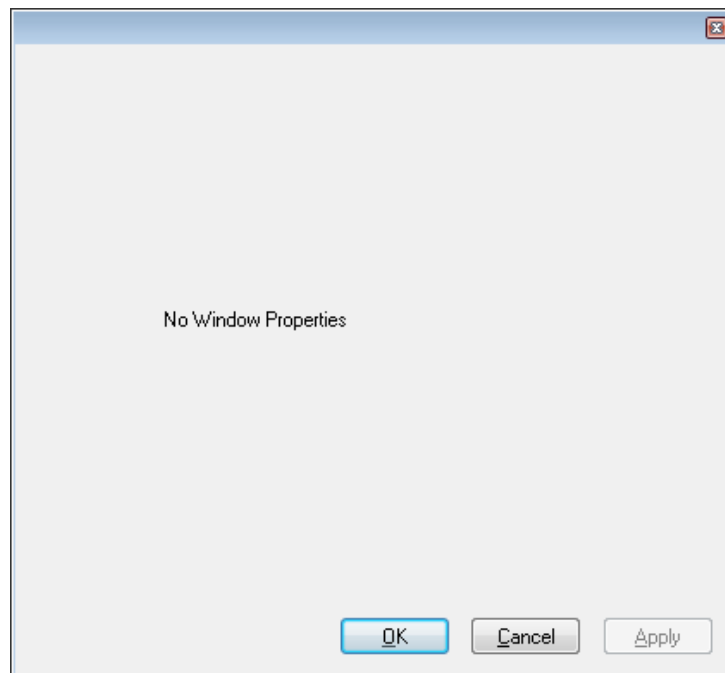


Figure 22 - No Window Selected Properties

Menus

In **Figure 23**, you see that a window has been selected and most of the menu items are now active. Clicking on a window icon will select it. All items shown in the Window menu will be performed on the **selected** window.

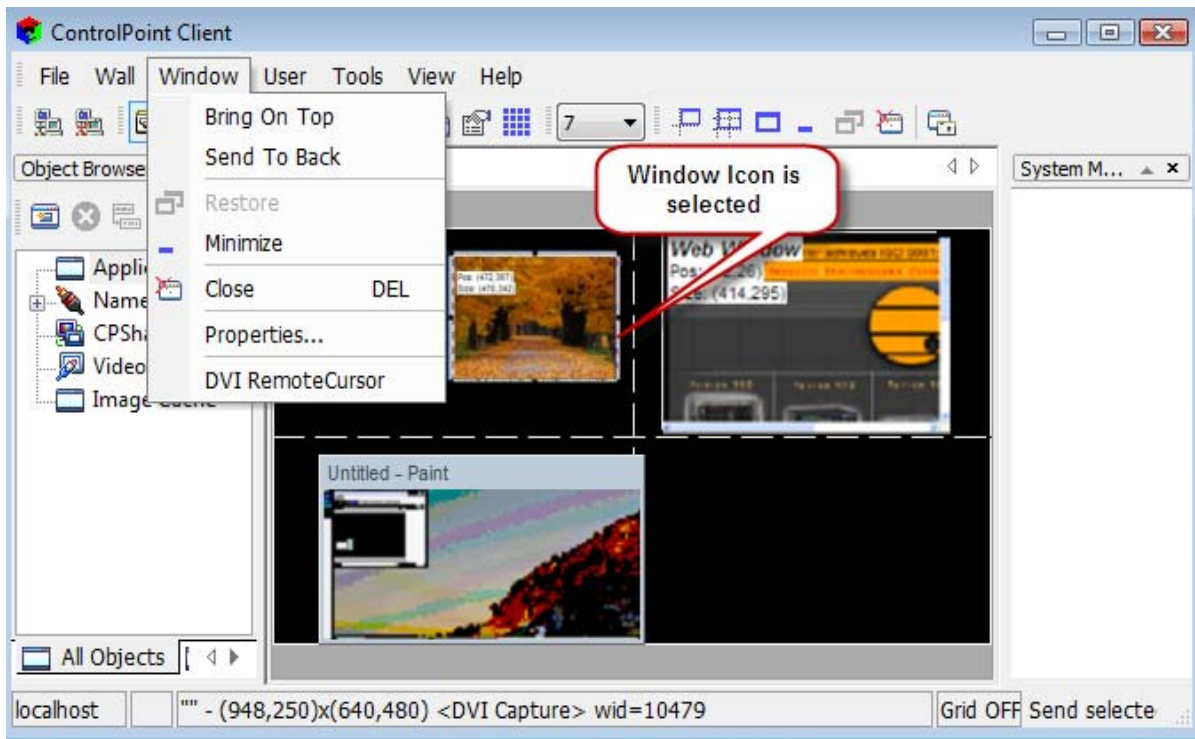


Figure 23 - Selected Item Menu

Note All **Window** menu items are performed upon the selected window only. When no window is selected, the Window menu item will be removed from the Menu Bar.

4—Client User Interface

4.1.2 Background Context Menu

Right-clicking on the ControlPoint window background will bring up the menu shown in the figure below. You can create new windows easily, as well as show the Window List. These items are explained in the following sections.

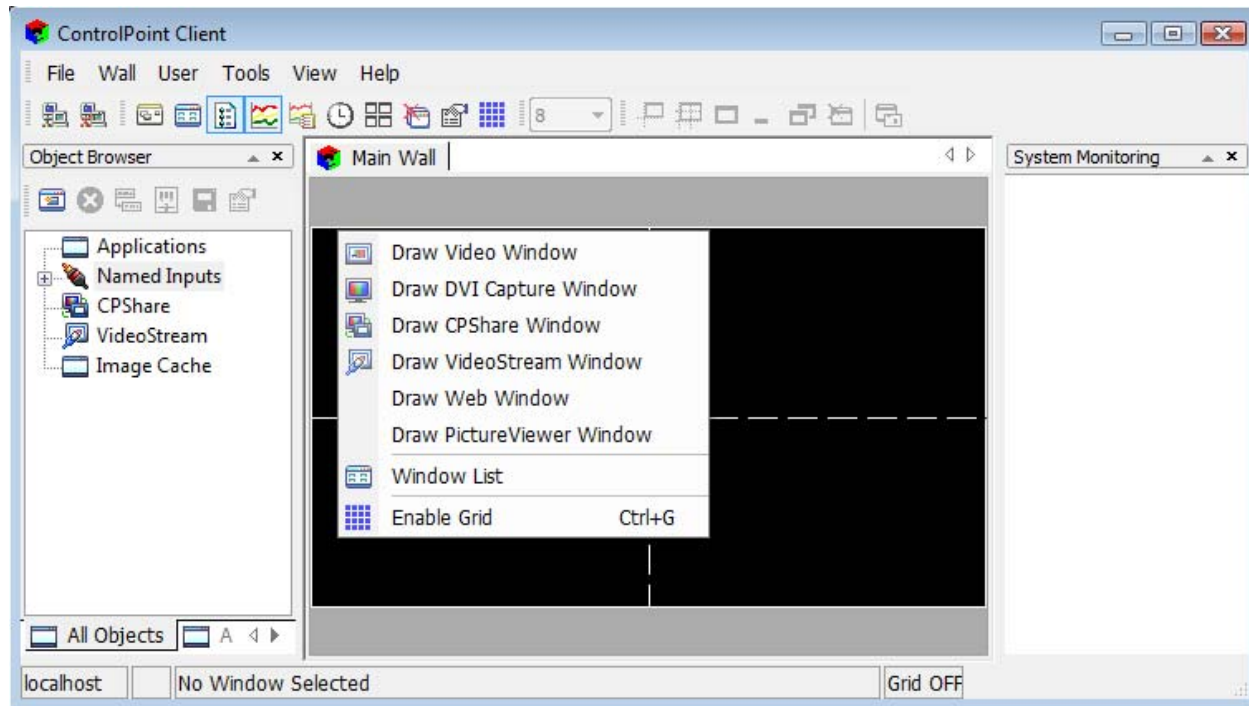


Figure 24 - Background Context Menu

Menus

4.1.2.1 Drawing a Window

When you select to draw a window, you will get a cross-hair cursor as shown in the following figure. You may now draw your window by clicking the mouse and dragging the box that is formed to the size you wish. The box size is scaled and the size is relative to the size of your ControlPoint window. Release the mouse button (stop the drag operation) when you get to the window size you desire.

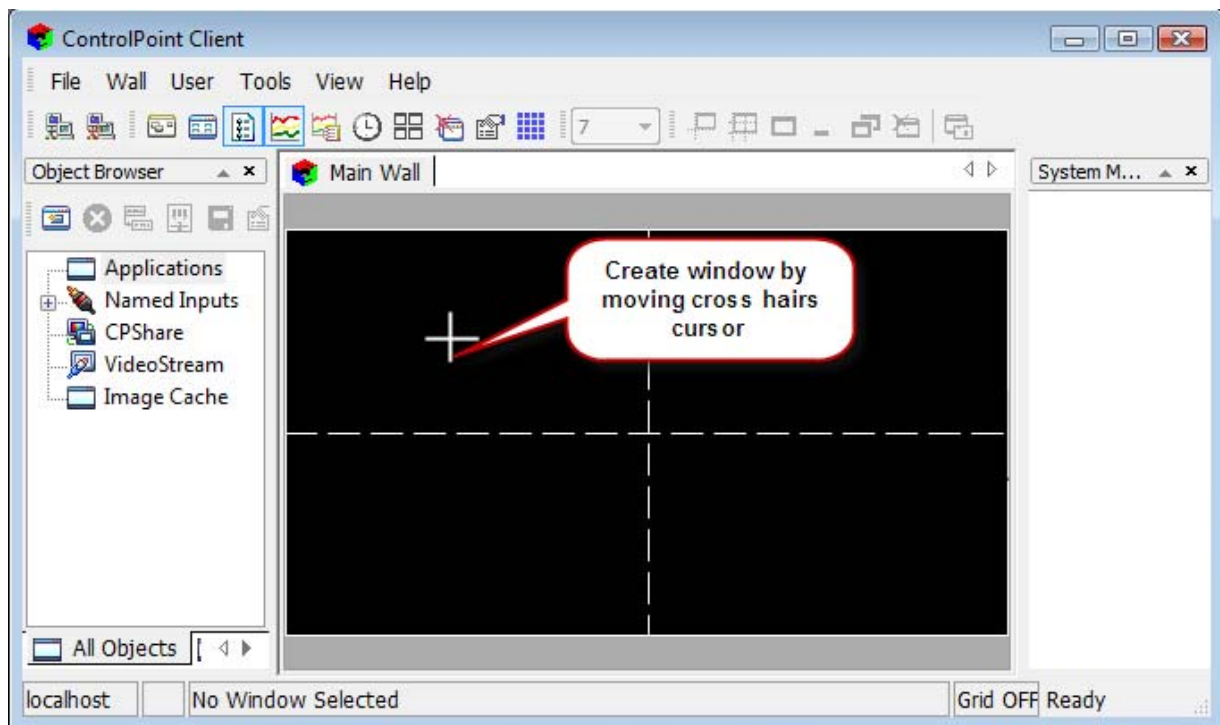


Figure 25 - Draw Video Window

Once you have created the window, you can size it precisely with the Placement Properties or by adjusting the size of the window with the sizing handles on the window icon in the ControlPoint window. Refer to ["Sizing Windows" on page 40](#) for more details.

4—Client User Interface

4.1.3 Menu Structure and Shortcut Keys

The following tables show the menu structure for ControlPoint. You can also use the **Table of Contents** or the **Index** (Menu) to see the structure of the menus used in the ControlPoint client.

Note In the following tables, **Bold** titles indicate sub-menus to follow and ">" indicates a sub-menu item.

Table 2: ControlPoint Menu Structure

File	Wall	Window	User
Connect to...	New Video Window	Bring on Top	Change Password
Disconnect...	New DVI Capture Window	Sent to Back	Manage Users
Open Connection	New CPShare Window	Restore	
Save As...	New IPStream Window		
Exit	New VideoStream Window	Minimize	
	New Web Window	Close	
	New PictureViewer Window	Properties...	
	New Window w/ User ID		
	> Video Window		
	> DVI Capture Window		
	> CPShare Window		
	> VideoStream Window		
	> IPStream Window		
	> Web Window		
	> PictureViewer Window		
	Event Scheduler...		
	Synchronize		
	Close All Windows		
	Close Server		

Menus

File	Wall	Window	User
	Restart Server Machine		
	Shutdown Server Machine		
	Execute Application...		
	Activate Remote Cursor		

Table 3: ControlPoint Tools, View, and Help Menu Structure

Tools	View	Help
Control VNC Host	Wall View	Server Info ...
Screen Test Pattern	> Wall Aspect Ratio	About CPClient
Layout Batch	> Scale to Fit	
	> Scale to 100%	
	> Hide Mouse Pointer	
	Layouts	
	Window Properties.	
	Window List	
	Object Browser	
	System Monitoring	
	Event Log	
	Status Bar	
	Toolbar	
	Toggle Grid	
	Options...	

Table 4: Context Menus

Context Background	Context Window Icon
	Wall
Draw Live Video Window	> Draw Live Video Window
Draw DVI Capture Window	> Draw DVI Capture Window
Draw CPShare Window	> Draw CPShare Window
Draw VideoStream Window	> Draw VideoStream Window
Draw Web Window	> Draw Web Window
Draw PictureViewer Window	> Draw PictureViewer Window
Window List	> Window List
Enable Grid	> Enable Grid
	Bring on Top
	Sent to Back
	Restore
	Minimize
	Close
	Properties...

4—Client User Interface

Several shortcut keys have been designed into the ControlPoint interface to allow you to do some operations with the application of a simple key combination.

The following table shows the shortcut keys used within ControlPoint.

Table 5: Shortcut Keys

Key Combination	Function
Ctrl+Alt+M	Pops up local menu at cursor
Ctrl+Alt+V	Opens new Video Window
Ctrl+Alt+R	Opens new DVI Window
Ctrl+Alt+P	Opens new CPShare Window
Ctrl+Alt+S	Opens new VideoStream Window
Ctrl+Alt+B	Opens new Web Window
Ctrl+Alt+T	Opens new PictureViewer Window
Ctrl+Alt+L	Opens the Layout dialog
Ctrl+Alt+W	Opens the Window List dialog
Ctrl+Alt+C	Remote Cursor Toggle

Shortcut keys (HotKeys) can also be assigned to Layouts. This gives you the ability to open and apply a layout to your Display Wall with a simple key combination.

Menus

4.1.4 Moving Windows

You can move a ControlPoint window by clicking in the body of the window. You will see the Move Cursor icon; just drag the window to the new position. You also have **fine control** when you move a selected window by using the arrow keys.

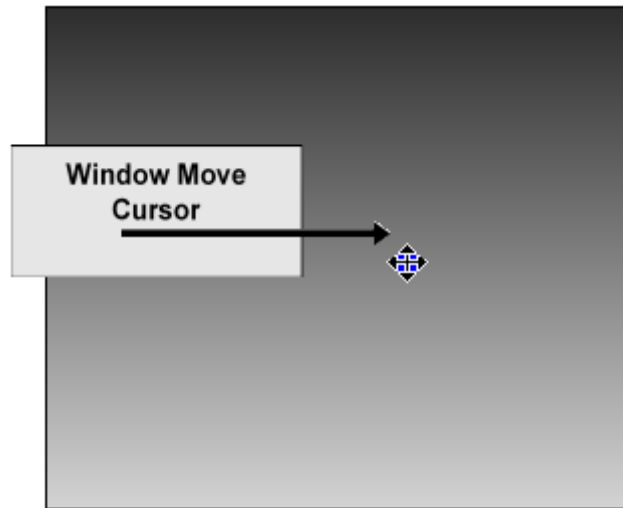


Figure 26 - Moving a Window Directly

Move the cursor over the window icon in the ControlPoint window. You will see the **Move** cursor, just click and drag the window to position it where you wish.

Note	The position of the window is reported in the window icon. Release the mouse button to update the position info when moving a window.
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4—Client User Interface

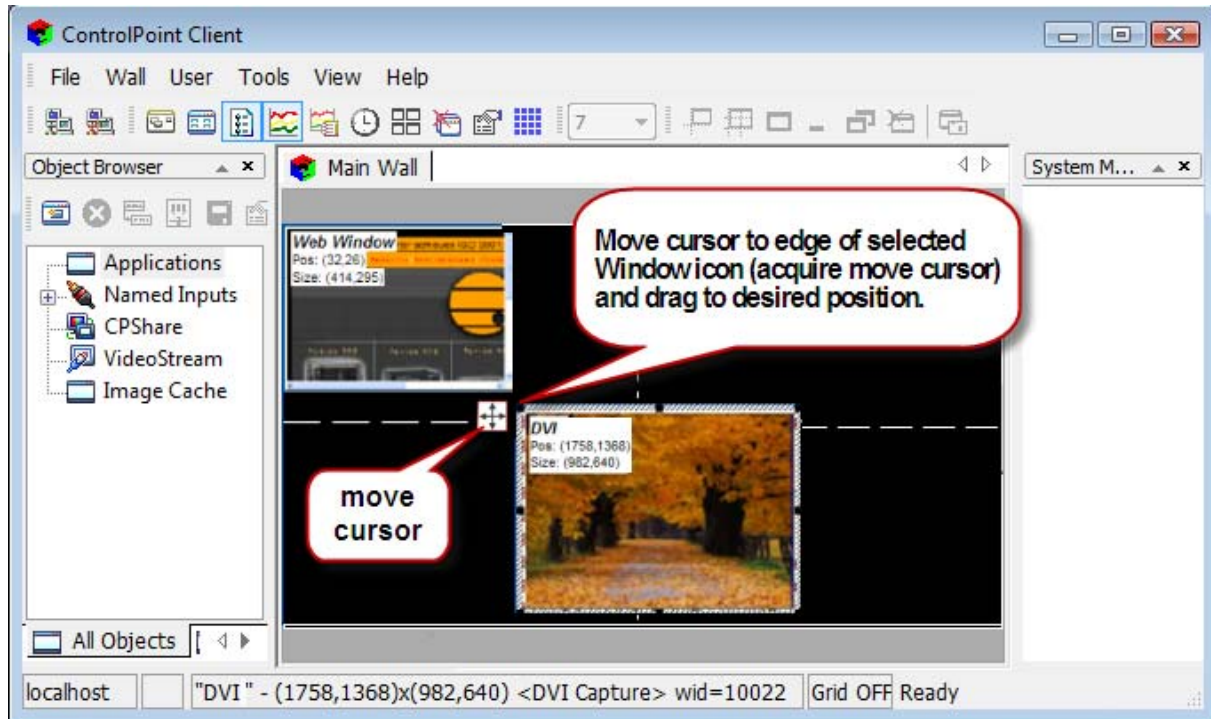


Figure 27 - Moving Window from Edge

Menus

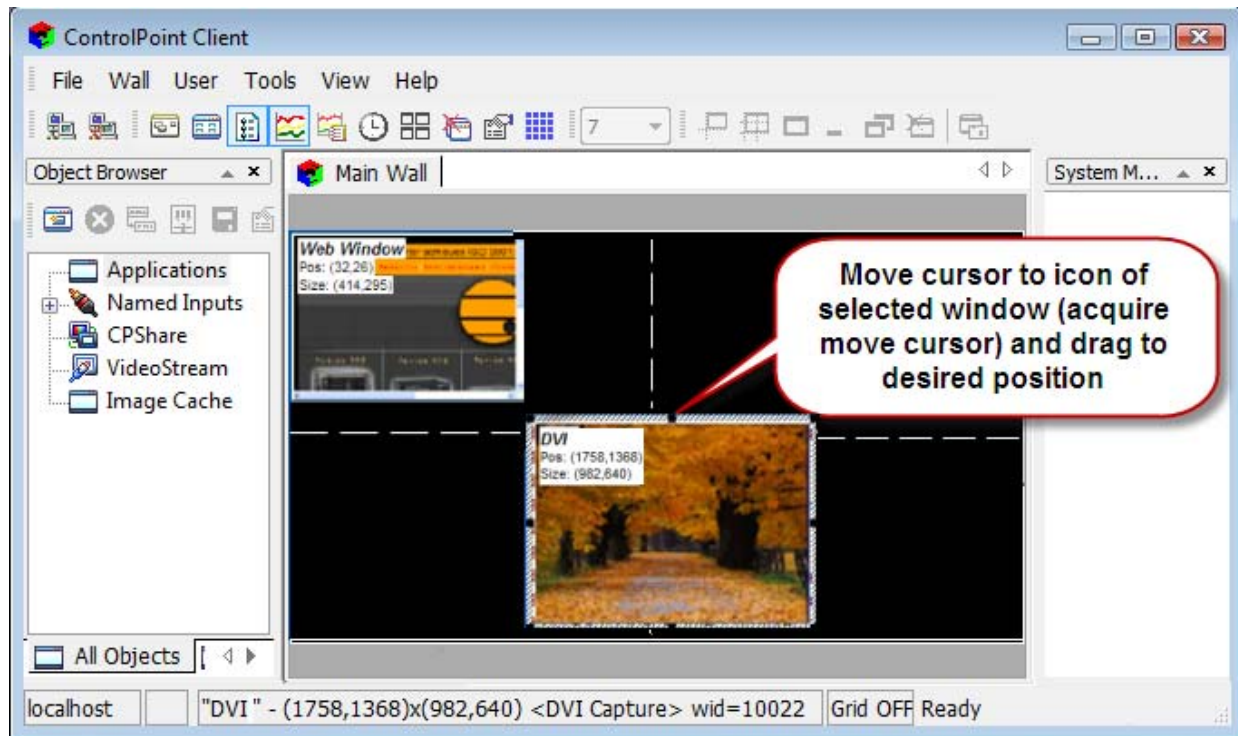


Figure 28 - Moving Window from Icon

4—Client User Interface

4.1.5 Sizing Windows

You can size a ControlPoint windows by moving the mouse cursor to a size handle on the window and acquiring the size cursor.

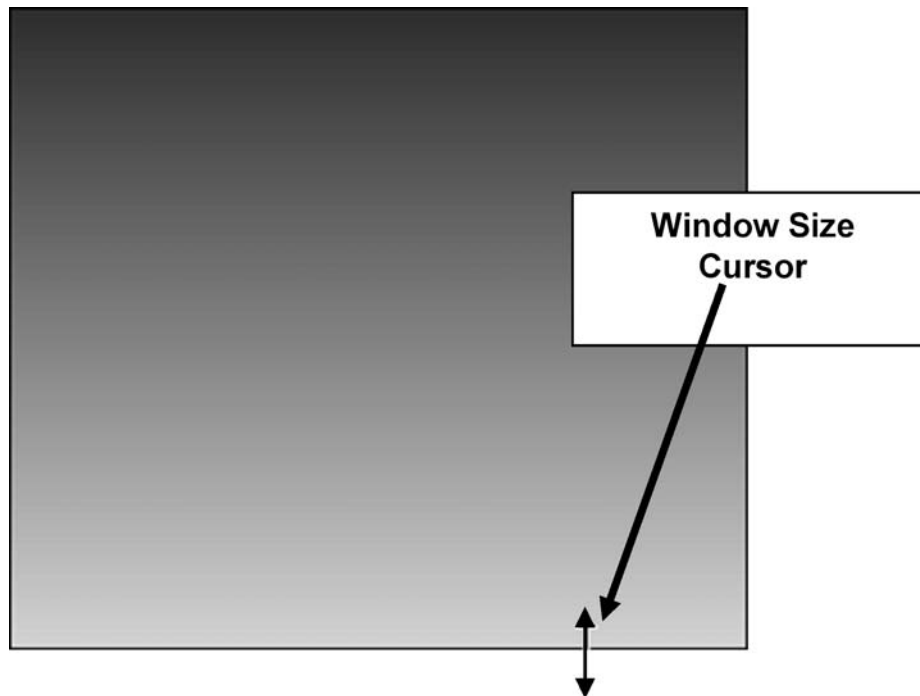


Figure 29 - Sizing a Window Directly

Note	The size of the window reported in the window icon. Release the mouse button to update the size info when sizing a window.
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Menus

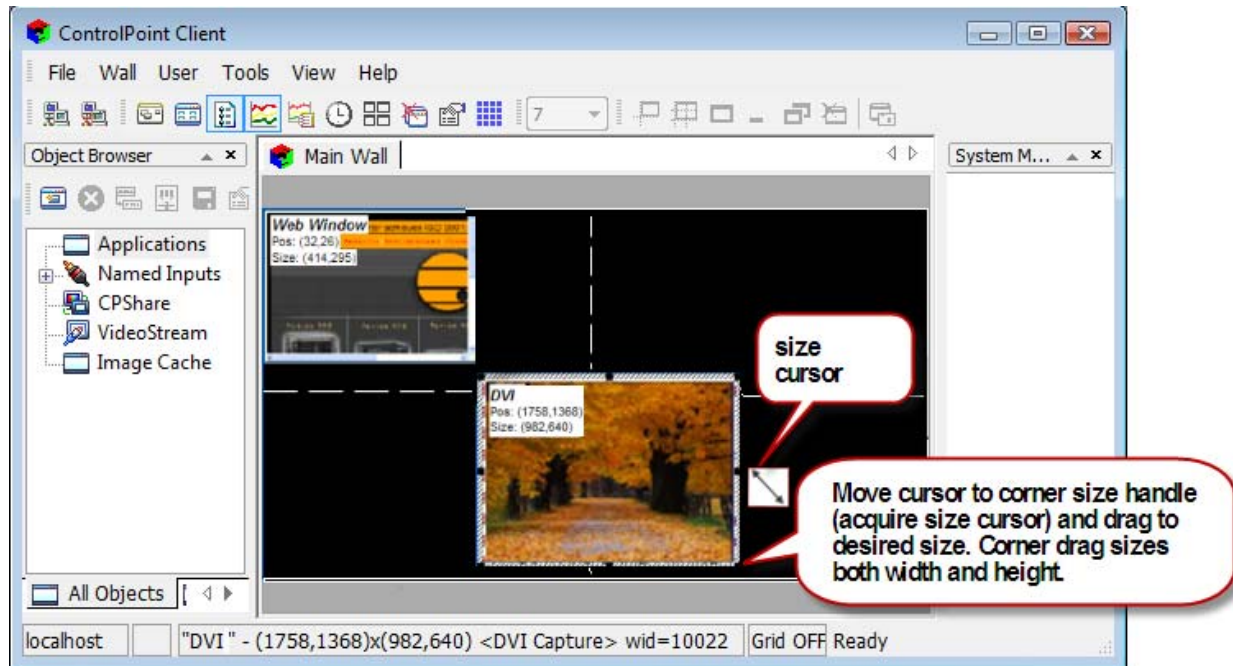


Figure 30 - Sizing from Corner

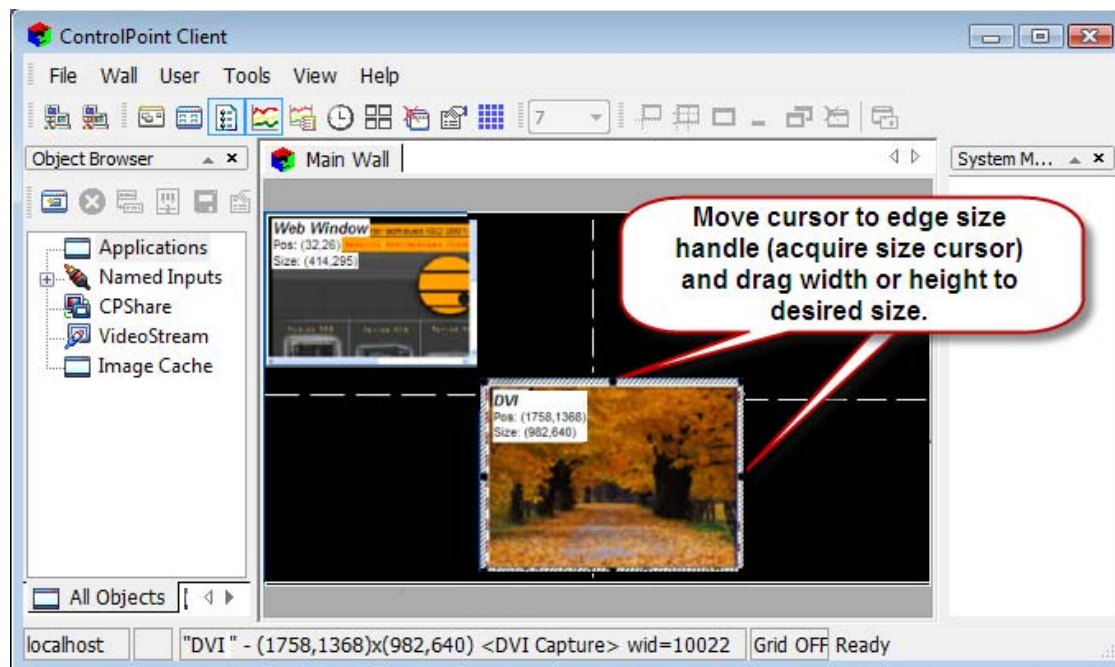


Figure 31 - Sizing a Window with ControlPoint

4—Client User Interface

4.1.6 Menu Selection

You can open the **Window** menu in two ways. Click the **Window** menu item to pop open the window menu or right-click on the window icon.

4.1.7 Window Menu

The **Window** menu is context sensitive. The menu depends on the type of window that is selected. The following figures show three examples of the Window menus.

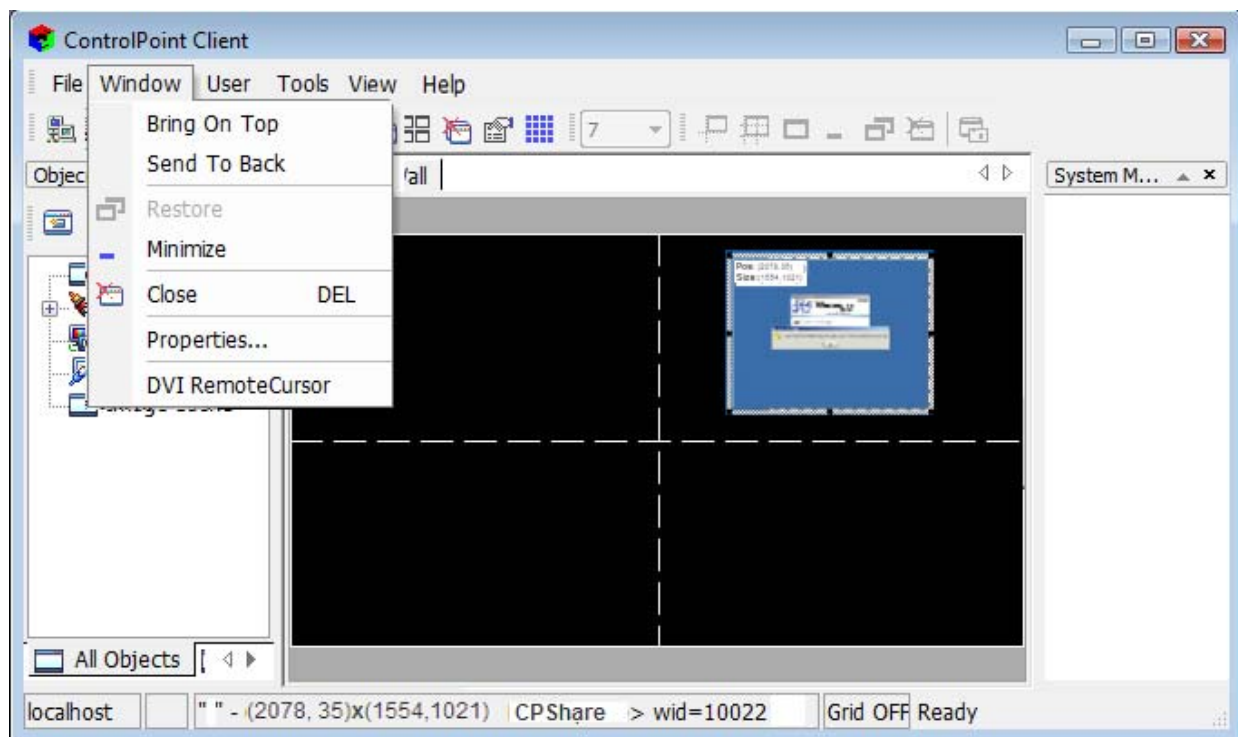


Figure 32 - CPShare Window Menu Bar Selection

Menus

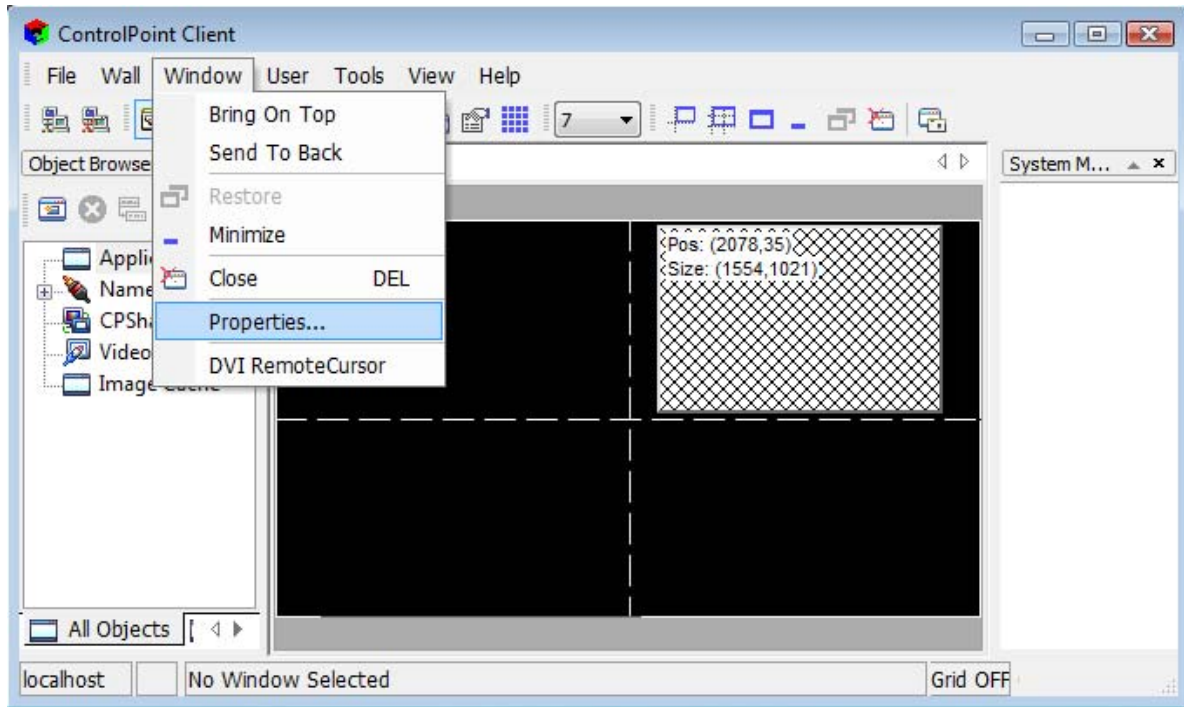


Figure 33 - Web Window Menu Bar Selection

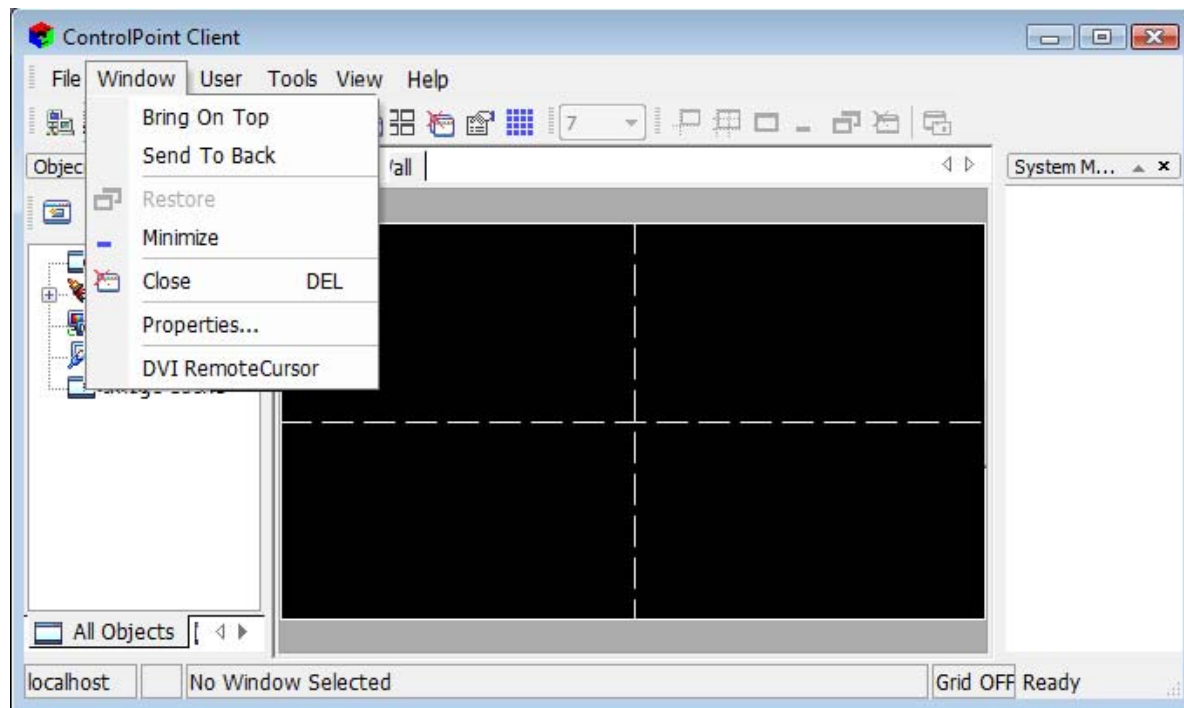


Figure 34 - Video Window Menu Bar Selection

4—Client User Interface

4.1.8 Window Icon

The following figure shows an example of the **Window** menu by right-clicking the window icon.

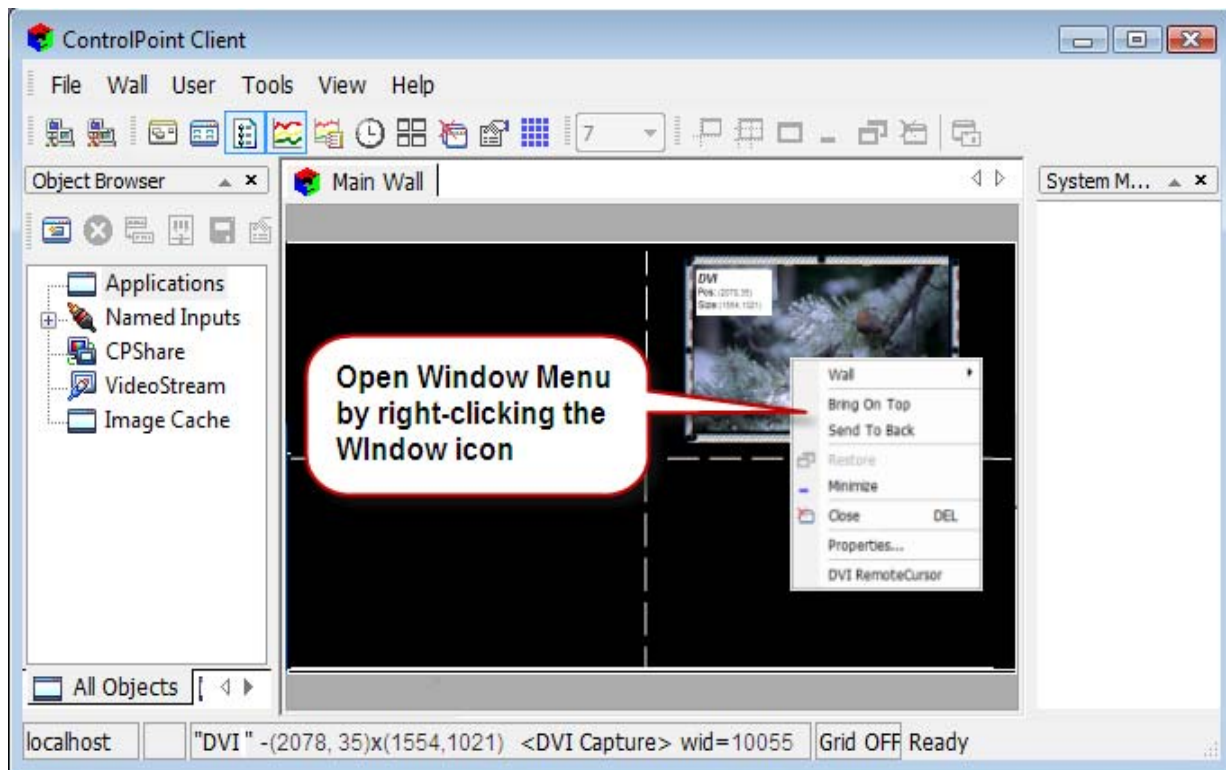


Figure 35 - Right-Click Window Icon Selection

Opening Window Properties

4.2 Opening Window Properties

To open the properties dialog for a window, either right-click the window icon or open the **Window** menu item and select **Properties** at the bottom of the menu as shown in the figure below.

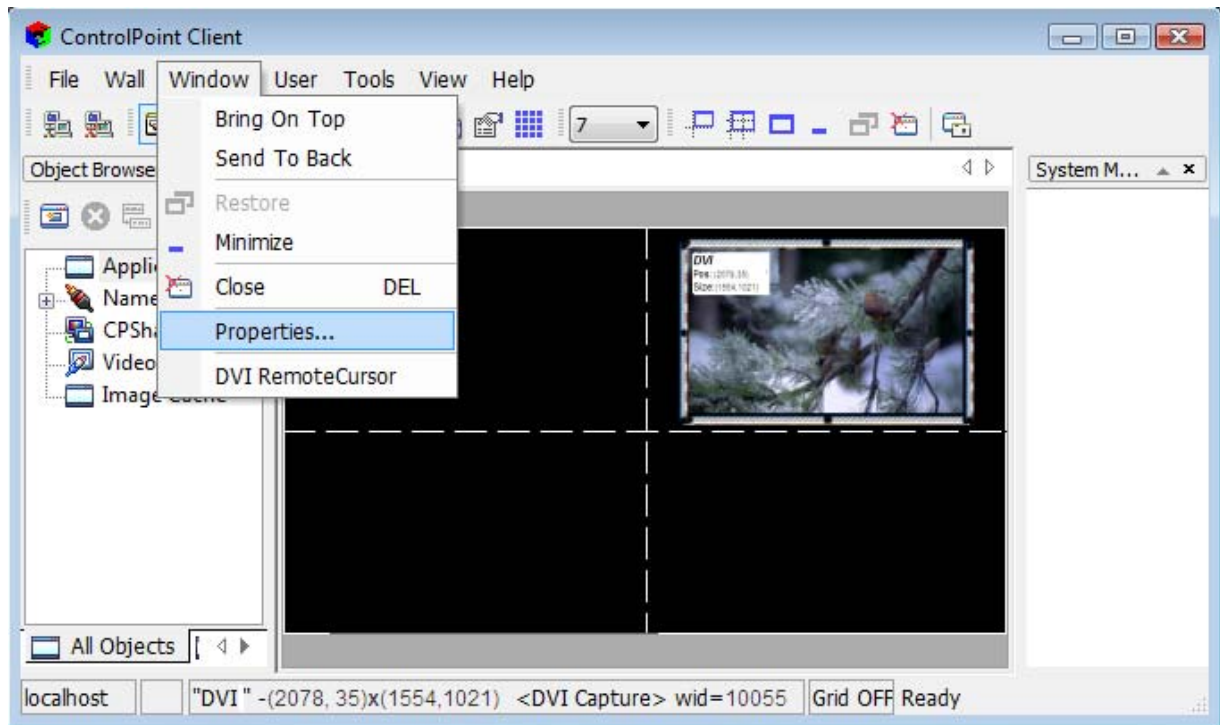


Figure 36 - Select Properties Menu

Hint	Once you have opened a Properties dialog, you need only select a different window icon to change to that window's Properties. You need not open another set of Properties as described above.
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4—Client User Interface

The three figures below show the opening **Properties** default **Source** page when opening properties for the respective window type, or with no window selected.

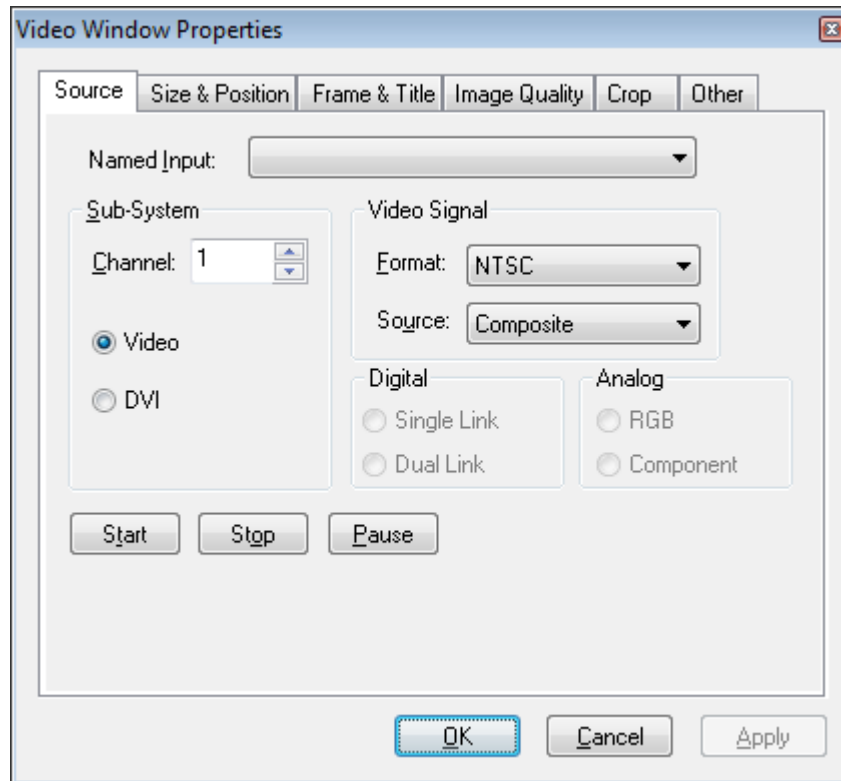


Figure 37 - Default Property Page (Video)

Opening Window Properties

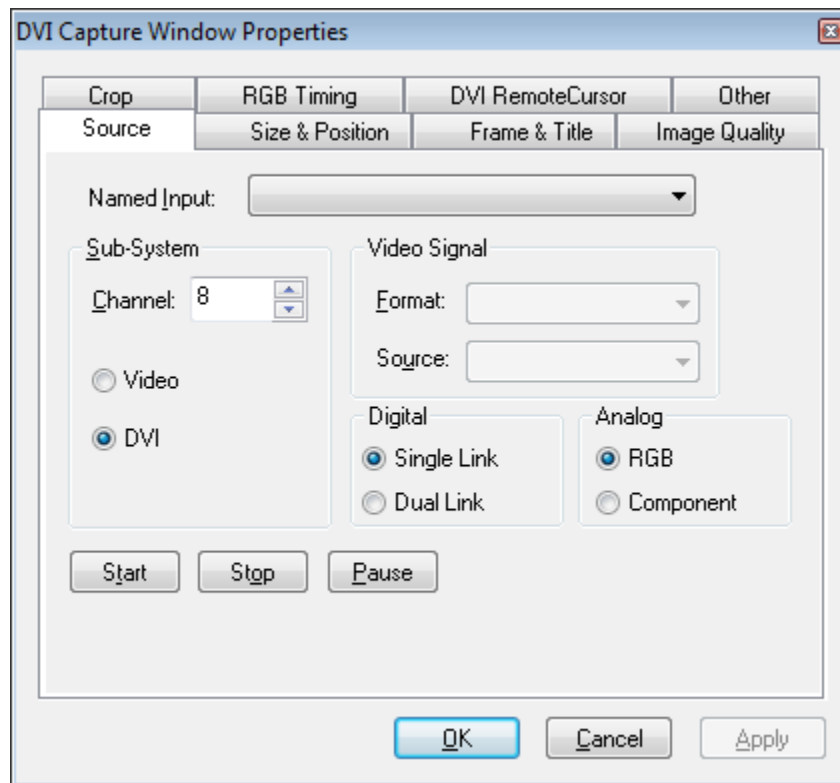


Figure 38 - Default Property Page (DVI)

4—Client User Interface

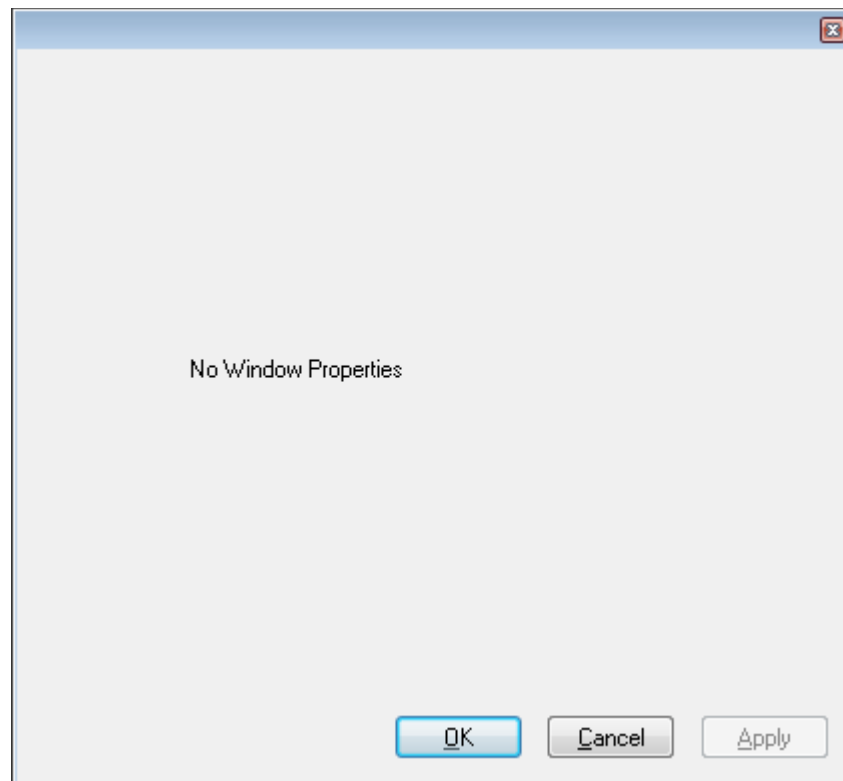


Figure 39 - Default Property Page (No Window Selected)

Selecting Windows

4.3 Selecting Windows

The following figure illustrates the difference between window icons that are selected and window icons that are not selected. You need only click on a window icon to select it. A window must be selected for menu operations to be performed upon it. Note that the Web Window icon is not selected and the Video Window icon is selected.

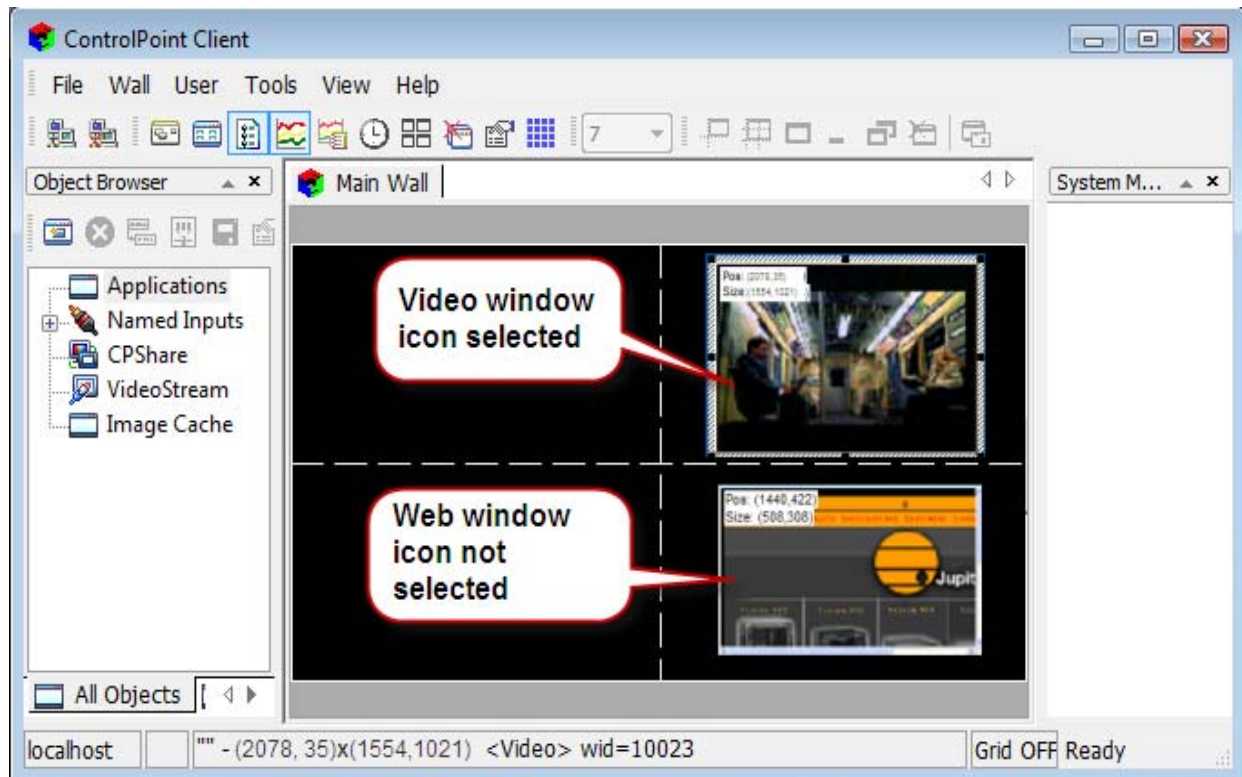


Figure 40 - Selecting Windows

Note	Once you have opened a Properties dialog, you need only select a different window icon to change to that window's properties.
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Chapter 5—Client Menu and Tool Bar

5. Client Menu and Tool Bar

The following figure shows the ControlPoint menu bar. All items in the menu bar and all sub-menus are described in the following sections.



Figure 41 - The Menu Bar

5—Client Menu and Tool Bar

5.1 File Menu

The **File** menu is shown in the figure below. Sub-menu items are described in following sections and refer to this primary menu figure.

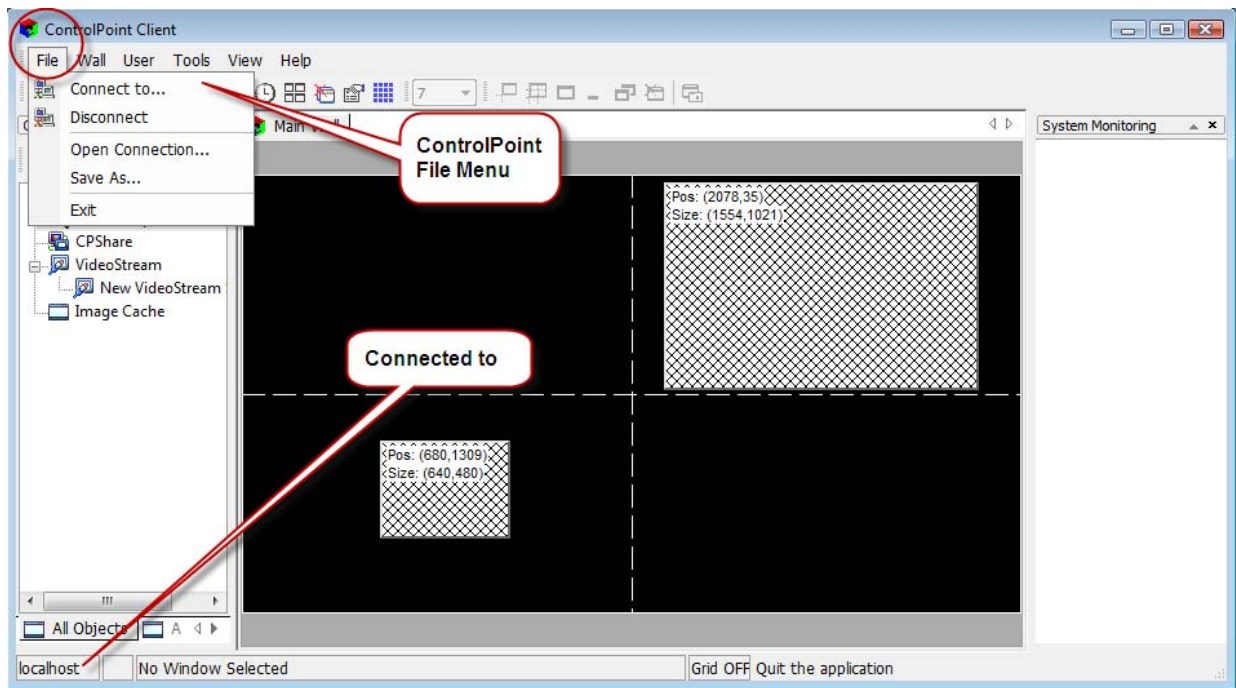


Figure 42 - File Menu

File Menu

5.1.1 Connect to

When you click on the **Connect to...** menu item you will see the dialog shown below. This item is provided to allow you to select the server you wish to connect to, as you may have more than one. Enter the name of the Jupiter Wall Controller. You can find this name by going to the Wall Controller, right-clicking **My Computer**, selecting **Properties**, and then the **Network Identification** tab. Look to the right of **Full Computer Name** – this is what you want to type into **Server Name** in the dialog box shown below. Use **localhost** (default) as shown in [Figure 43](#) if you are going to control your windows locally on the Wall Controller System. A workstation may connect to more than one Wall Controller System. A Wall Controller may be controlled by more than one remote workstation.

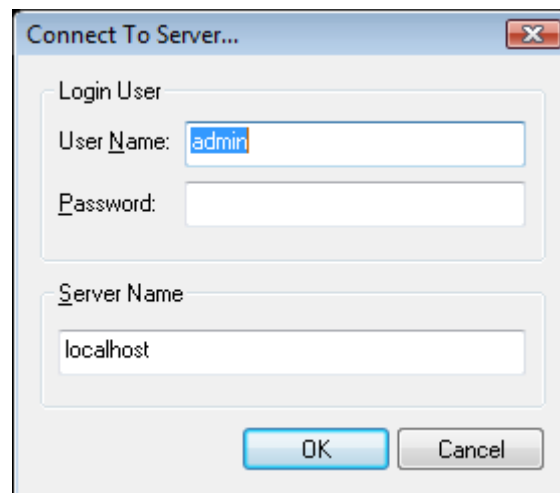


Figure 43 - Connect to... Dialog

You will be required to enter a **User Name** and **Password**. These log-in parameters refer to the **ControlPoint Server** and **NOT** the Windows system to which you are connecting. ControlPoint keeps its own user-name/password list. The user-name/password given to you by the ControlPoint administrator may **not** be the same as those given to you for the Windows OS itself.

The default login is admin (**User Name**) with no password.

5—Client Menu and Tool Bar

5.1.2 Disconnect

Click **Disconnect** and you will be immediately disconnected from the server to which you have been connected. There is no confirmation dialog, disconnect is unconditional and absolute.

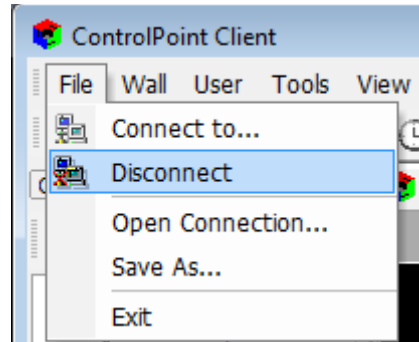


Figure 44 - Disconnect Menu Item

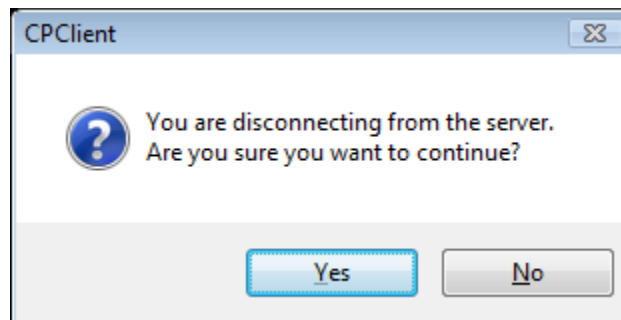


Figure 45 - Disconnect Warning

File Menu

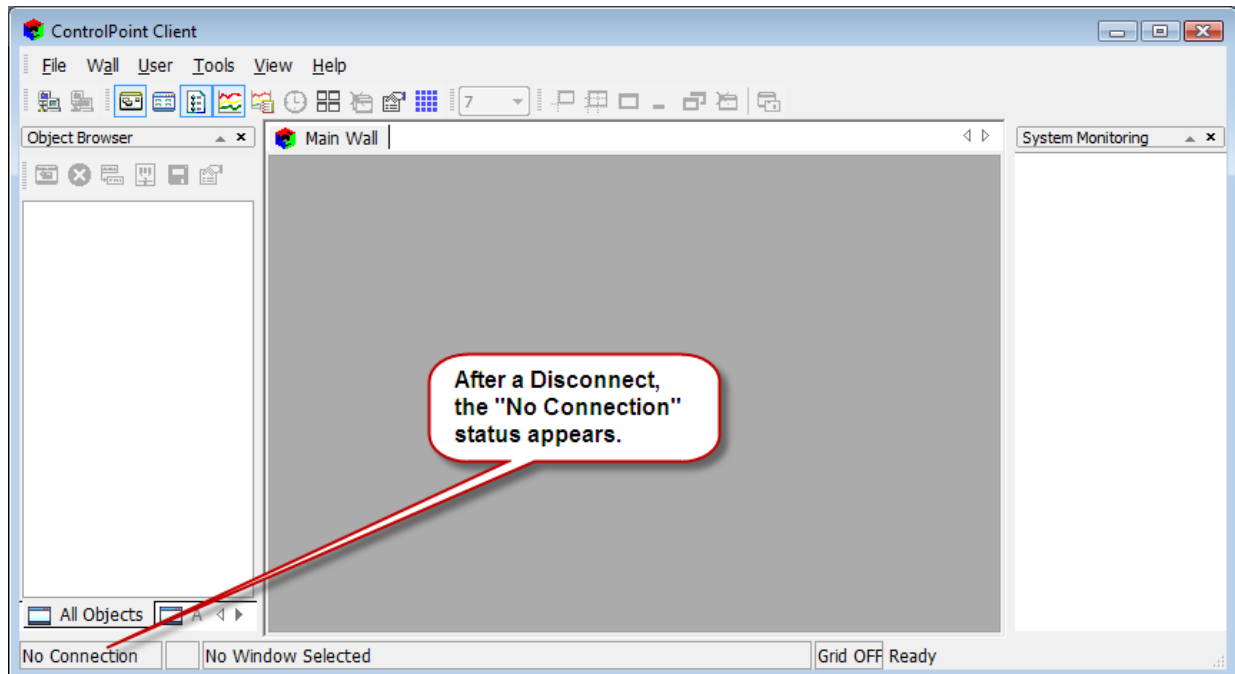


Figure 46 - Appearance of Window after Disconnect

Figure 46 shows the disconnected status and has no scaled wall mimic.

5.1.3 Open Connection

The **Open Connection...** menu item allows you to open a previously saved connection (refer to **Save (Connection) As...** in the following page).

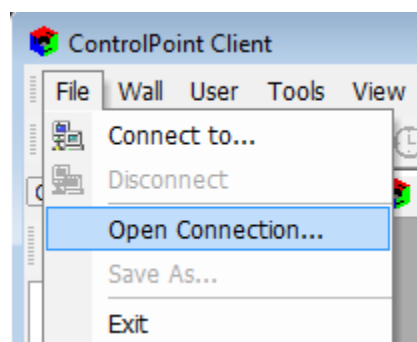


Figure 47 - Open Connection...Menu item

5—Client Menu and Tool Bar

You will see the dialog shown below. Select a connection and click the **Open** button to open that connection.

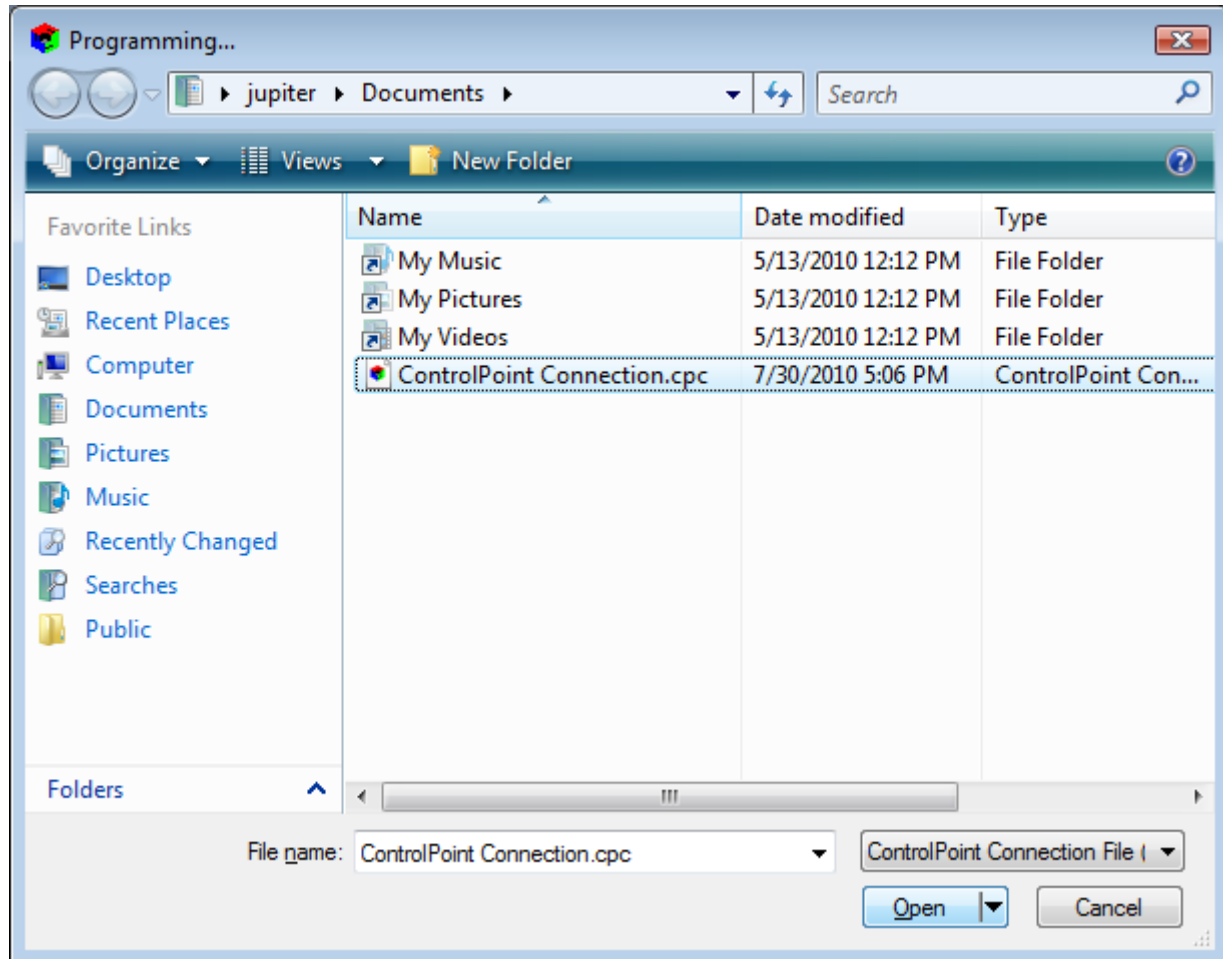


Figure 48 - Open Connection

File Menu

5.1.4 Save (Connection) As

The **Save As** menu item allows you to save a connection. This action saves the **User Name** and **Server Name** (refer to [Figure 43](#)) as a file. The password is never saved.

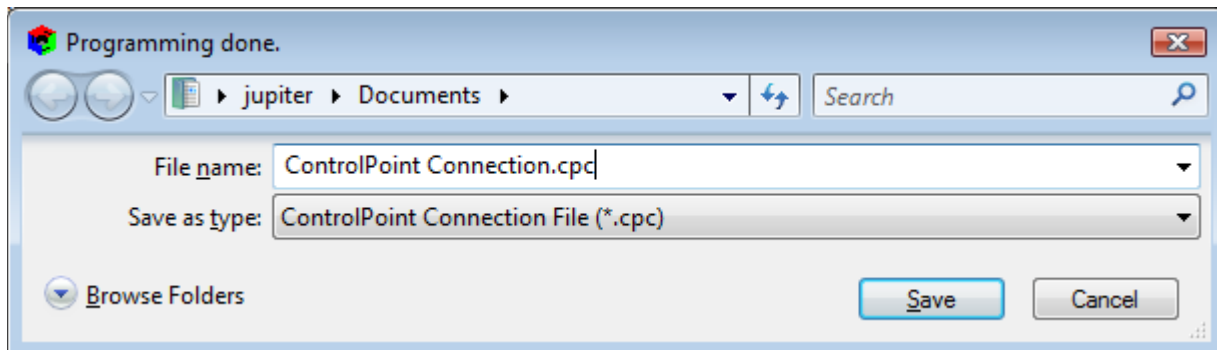


Figure 49 - Save (Connection) As...Dialog

The **Save Connection** option saves you from having to remember Login names and Server name and their combinations. With a simple Connection Name like **Joe-Server1**, you can open the proper user name and server name, and then just enter your password.

5.1.5 Exit

The **Exit** menu item will terminate the ControlPoint Client application, but leave any opened windows still open and operating on the Display Wall. This is the same as clicking the **X** button in the upper right corner.

5—Client Menu and Tool Bar

5.2 Wall Menu

The **Wall** menu is shown open in the figure below. Sub-menu items are described in following sections and refer to this primary menu figure.

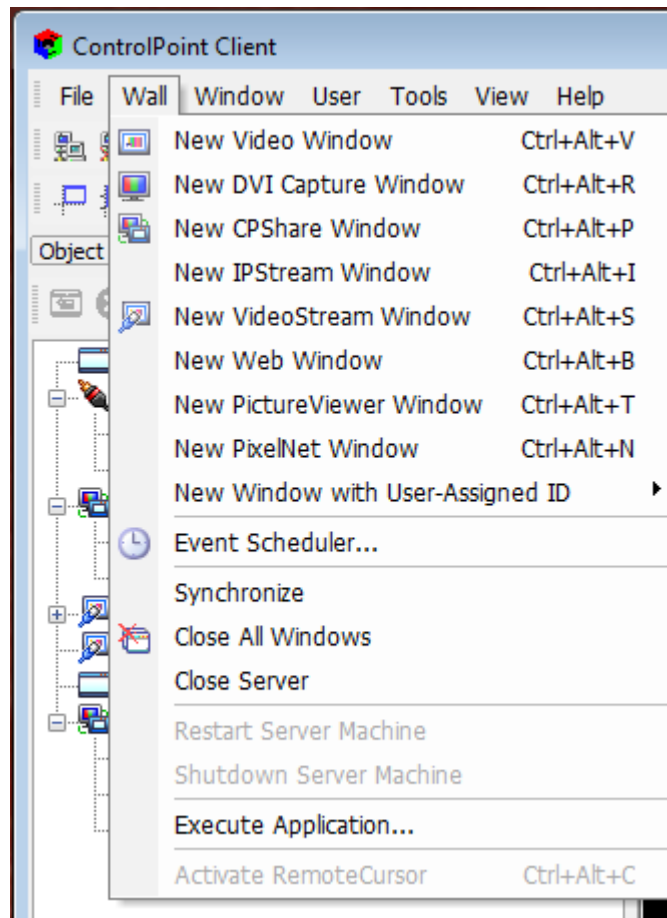


Figure 50 - ControlPoint Wall Menu

5.2.1 New Video Window

Clicking the **New Video Window** menu item (or pressing **Ctrl+Alt+V**) will open a Video window on the desktop at position (0,0). Video windows will always be open in their native size (e.g. NTSC = 640x480). The operator can scale the video window to the size needed. Video windows can be overlapped.

Wall Menu

5.2.2 New DVI Capture Window

Clicking the **New DVI Capture Window** menu item (or pressing **Ctrl+Alt+R**) will immediately open a DVI window on the desktop at position (0, 0). DVI windows will always open at a **default** size of 640x480. The operator can set the DVI window to a desired size if needed.

5.2.3 New CPShare Window

Clicking the **New CPShare Window** menu item (or pressing **Ctrl+Alt+P**) will immediately open a **CPShare** window on the desktop at position (0,0). Note that this window will not have content until a **CPShare** object is created and selected for this window. Please refer to **ControlPoint Objects** for detailed information.

5.2.4 New VideoStream Window

Clicking the **New VideoStream Window** menu item (or pressing **Ctrl+Alt+S**) will immediately open a VideoStream window on the desktop at position (0,0). This window will not have content until a **VideoStream** object is created and selected for this window. VideoStream windows cannot be overlapped. When opening a VideoStream window, the system will automatically find a suitable place large enough for the window.

5.2.5 New IPStream Window

Clicking the **New IPStream Window** menu item (or pressing **Ctrl+Alt+I**) will open an IPStream window on the desktop at position (0,0). This window will not have content until an IPStream object is created and selected for this window.

5.2.6 New Web Window

Clicking the **New Web Window** menu item (or pressing **Ctrl+Alt+B**) will immediately open a Web window on the desktop at position (0,0). Note that this window will not have content until a Web window object is created and selected into this window. Please refer to **ControlPoint Objects** for detailed information.

5—Client Menu and Tool Bar

5.2.7 New PictureViewer Window

Clicking the **New PictureViewer Window** menu item (or pressing **Ctrl+Alt+T**) will immediately open an image window on the desktop at position (0,0). Note that this window will not have content until a path to an image to be displayed has been entered. The window properties will open along with the window, allowing you to enter the path. Please refer to ControlPoint Objects for detailed information.

5.2.8 New PixelNet Window

Clicking the **New PixelNet Window** menu item (or pressing **Ctrl+Alt+F**) will immediately open a PixelNet window on the desktop at position (0,0). Note that this window will not have content until a PixelNet input source is entered for this window. Please refer to **All Objects** for detailed information.

5.2.9 New Window with User-Assigned ID

The **New Window with User-Assigned ID** menu item ([Figure 51](#)) has seven sub-menu items: one for creating a new Video Window, DVI Capture Window, CPShare Window, VideoStream Window, Web Window, or the PictureViewer Window.

The main purpose of the **User-Assigned Window ID** is for control of the Wall Controller System by serial devices, such as Touch Panel controllers (i.e. AMX or Crestron) through either a serial (RS232) or Ethernet connection. The instructions used by the Touch Panel to control the display wall will address the window by its unique ID number.

All windows have a unique ID number. Windows opened manually through the menus or by the hot keys are referred to as ad hoc. Ad hoc Windows have ID numbers generated by the server (Server Assigned ID) and are always greater than 10,000. User-Assigned ID numbers will always be greater than 0 and less than 10,000.

Wall Menu

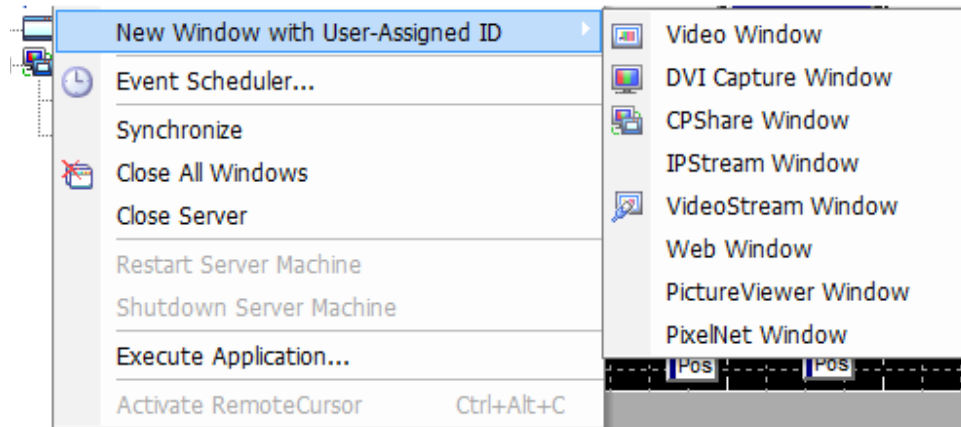


Figure 51 - New Window with User-Assigned ID Menu Selection

When you click one of the choices from the **New Window with User-Assigned ID** menu, you will be asked for a window ID, as shown in the figure below. Enter the ID number by the convention used by your organization and click OK.

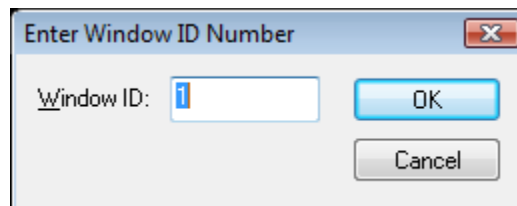


Figure 52 - Window ID Number Entry

The User-Assigned window **ID** numbers must be **unique** and less than 10,000. An error message will be displayed if you attempt to create a **Window ID Number** that is the same as one already being used (not a unique number) Control of displayed windows by the a serial device or third party external program will must be by addressing the window through its ID number.

5—Client Menu and Tool Bar

Note User-Assigned Window ID numbers are mainly for use by external devices that will be controlling windows on the Wall Controller System through an RS232 or network connection. Each window assigned a User ID must have a unique ID number. User-Assigned ID numbers must be **less** than 10,000 and greater than zero.

Windows created with **User Assigned ID** numbers open the same as described in previous sections. Refer to the window type for specific information about opening the window.

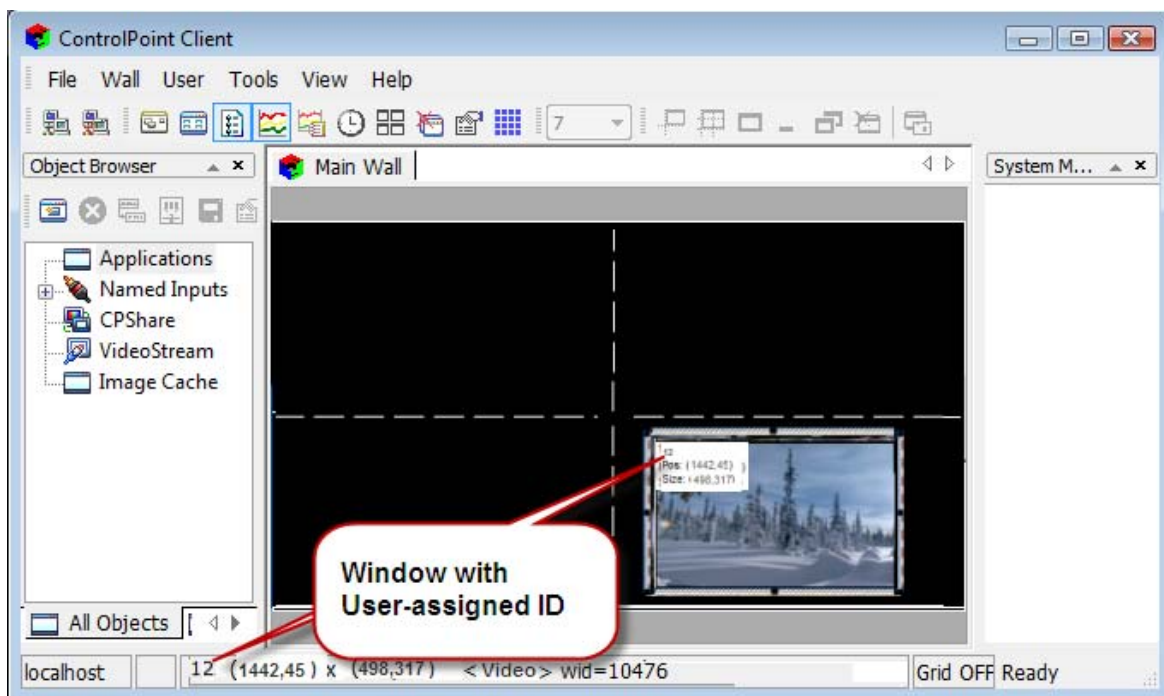


Figure 53 - Video Window with User Assigned ID

Wall Menu

5.2.10 Event Scheduler

You can schedule layouts changes or execute third-party applications on a time schedule. Applications run through the **ControlPoint Scheduler** must be registered as **Application Objects**. Refer to the section on Objects for detailed information about **Application Objects**.

5.2.10.1 Scheduling a New Event

To schedule a new event, open click the **New Layout** or **New Application** button, or open the context menu a blank area of the window.

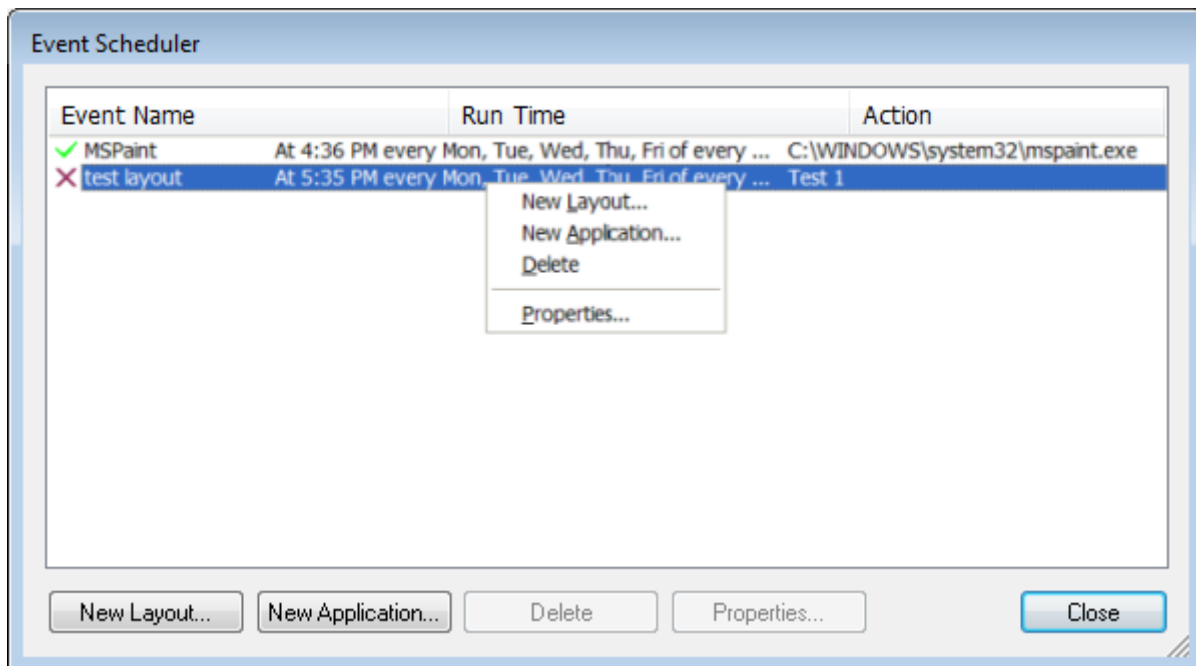


Figure 54 - Event Scheduler

New Layout opens a new layout event dialog and **New Application** opens a new third-party application event dialog. All events have a unique event name and are triggered at the selected time. To edit an event, select the event from the event list and open **Properties...** from the context menu or double click the entry in the even list.

5—Client Menu and Tool Bar

5.2.10.2 Layout Event Properties

When a new layout event is created or an existing event is open to edit, the event control opens as shown below.

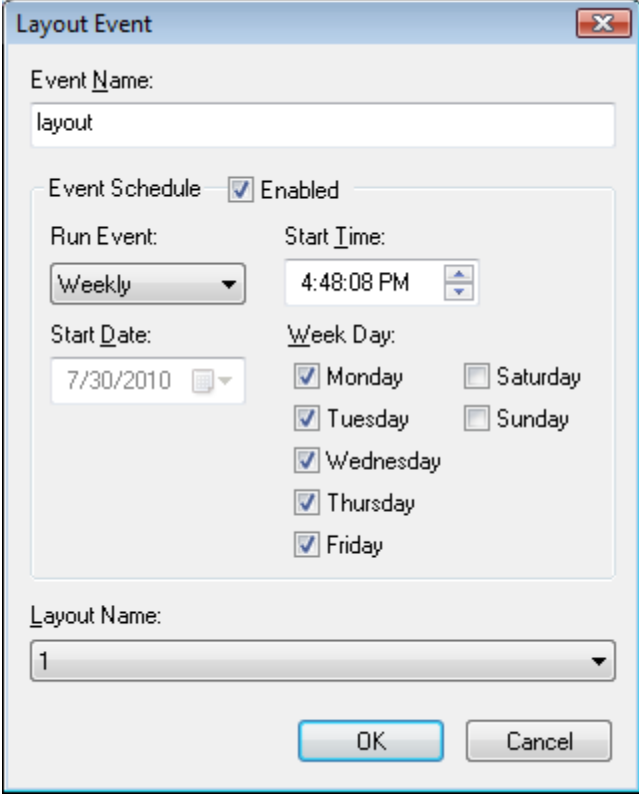


Figure 55 - Layout Event Properties

Event Name specifies the name of the event object. Event object names must be unique. This field is enabled for editing when creating a new object and disabled when editing the properties of an existing object. ControlPoint automatically suggests a unique name when a new object is created.

Run Event selects the type of schedule for the users. The choices are **Weekly** (repetitive schedule on the selected week-days, starting at a given time) or **Once** (one-time trigger at the specified date and time).

Start Time specifies the trigger start time.

Start Date specifies the date for the event (this field is only enabled for one-time triggers.)

Wall Menu

Week Day specifies the weekdays on which a repetitive, weekly schedule will run. Mark the check-box for desired days for the event.

Layout Name defines the layout to be applied when the event is triggered. Select a predefined layout from the drop-down list.

Enabled specifies the event is enabled or disabled.

5.2.11 Synchronize

The **Synchronize** menu item synchronizes the ControlPoint client with the ControlPoint Server. When saving changes in the **Security Editor**, the changes must also be saved in **ControlPoint Client** using the **Synchronize** menu item. Only then does the Client inherit all the changes in the Editor.

5.2.12 Close all Windows

The **Close All Windows** menu item will close all ControlPoint windows on the desktop.

5.2.13 Close Server

The **Close Server** menu item closes the **CPServer** process and **closes** the connection with any open ControlPoint Clients. **Close Server** also closes all ControlPoint windows open on the desktop. If selected, you will get the close server confirmation shown in the figure below. You can restart the server through the **Start** menu (refer to [Figure 5](#)).

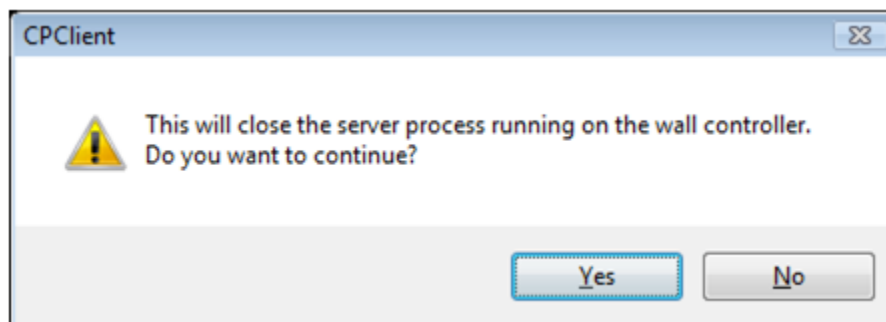


Figure 56 - Close Server Confirmation

5—Client Menu and Tool Bar

5.2.14 Restart Server Machine

The **Restart Server Machine** menu item will restart the ControlPoint Server machine.

5.2.15 Shutdown Server Machine

The **Shutdown Server Machine** menu item will shutdown the ControlPoint Server machine.

5.2.16 Execute Application

This selection allows the user to browse and execute an application installed on the server.

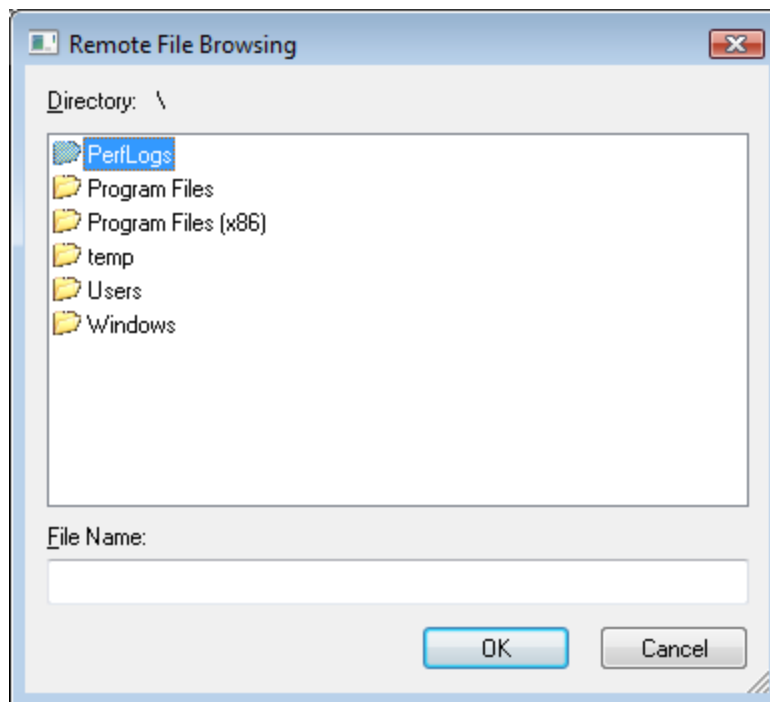


Figure 57 - Execute Application

Wall Menu

5.2.17 Activate Remote Cursor

This selection activates Remote Cursor; it can also be activated pressing the hot keys (Ctrl+Atl+C). This hot key combination can be configured. Refer to **"Options" on page 198**.

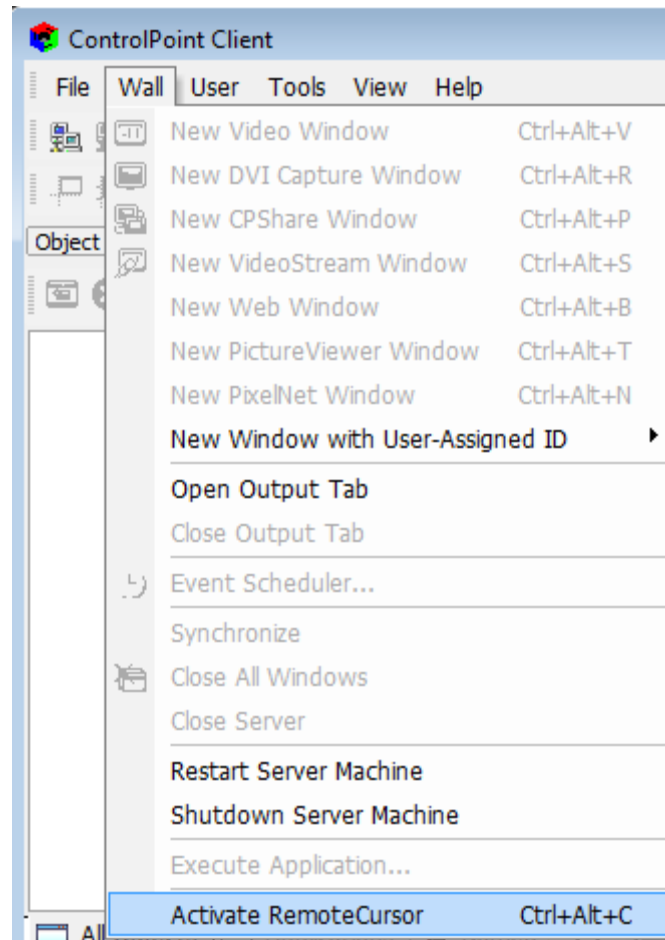


Figure 58 - Activate Remote Cursor

5—Client Menu and Tool Bar

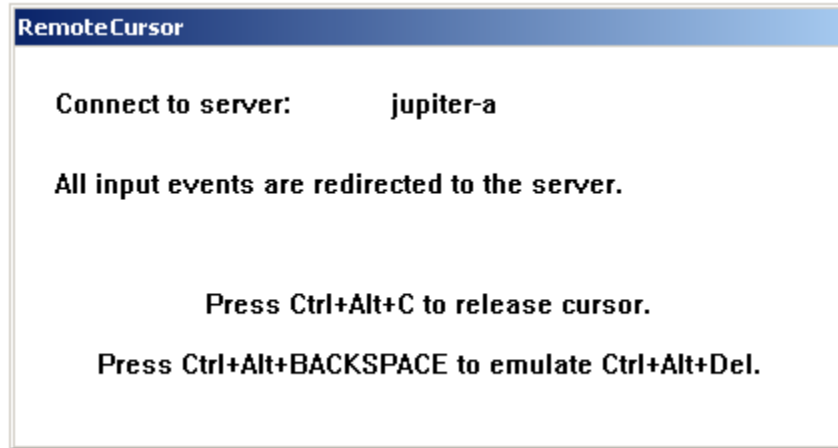


Figure 59 - Activate Remote Cursor Icon

When you activate Remote Cursor, **Figure 59** appears and the local cursor disappears. You are now in direct control of the Fusion system with your workstation keyboard and mouse, just as if you were using the keyboard mouse and system connected to the Fusion system.

Note	Remote Cursor requires direct visual contact with the display wall to be used.
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For more information on Remote Cursor, refer to "[Chapter 8. Remote Cursor](#)".

Window Menu

5.3 Window Menu

The **Window** menu is shown open in the following figure. Sub-menu items are described in the following sections and refer to this primary menu figure. The **Window** menu may also be open by right-clicking a window icon within the ControlPoint Client window as shown in the following figure.

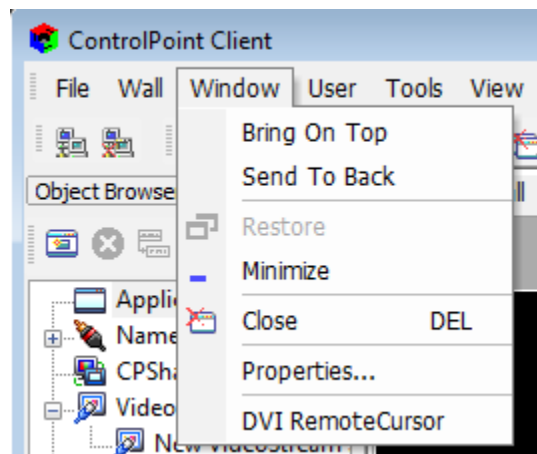


Figure 60 - Window Menu

Note	The Window menu item only appears when a window is selected.
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5.3.1 Bring On Top

The **Bring on Top** menu item will pop a window above other windows. ControlPoint will always put the selected window above all other ControlPoint windows but is not guaranteed to do so with other windows that have been set for **Always on top**, or won't allow changes in the stack.

5—Client Menu and Tool Bar

5.3.2 Send to Back

The **Send to Back** menu item will send a window below all other windows. ControlPoint will always put the selected window behind all other ControlPoint windows but is not guaranteed to do so with other windows that have been set for Always on top, or won't allow changes in the stack.

5.3.3 Restore

The **Restore** menu item restores a window that has been **Minimized** to the **Task Bar** or has been **Maximized**, to its previous size. This is a standard Windows operation.

5.3.4 Minimize

The **Minimize** menu item removes a window from the desktop and leaves it on the **Task Bar**. You can use the **Restore** item (above) if you have not selected another item. Click the **Task Bar** button to restore **Minimized** windows. This is a standard Windows operation.

5.3.5 Maximize

The **Maximize** menu item expands a window to full screen size. Use the **Restore** item (above) to return the window to its original size. This is a standard Windows operation. You can also **Restore** a window by right-clicking on the window image itself and selecting **Restore**. You cannot Maximize Video and Steaming Video Windows.

5.3.6 Close (Window)

The **Close** item will delete the currently selected window. If no window is selected, this operation will be grayed out (de-activated). There is no confirmation dialog associated with the **Close** operation – it will be deleted immediately and permanently.

Window Menu

5.3.7 Properties

The **Properties...** menu item will bring up the properties for the selected window.

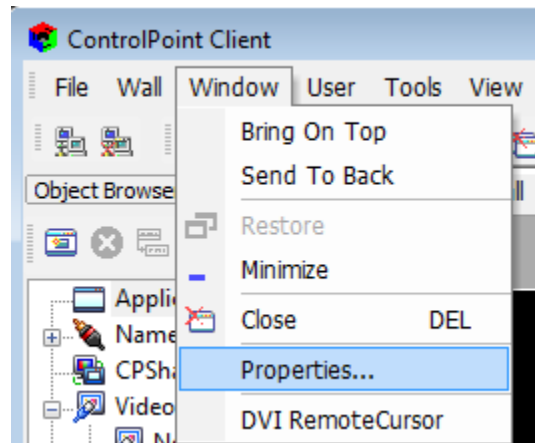


Figure 61 - Selecting Window Properties

When **Properties** is selected, the tabs presented within the properties will differ depending on the type of window selected. These differences can be seen in the following pages describing the different window **Properties** pages.

- Video Window
- DVI Capture Window
- CPShare Window
- Web Window
- PictureViewer Window
- IPStream Window
- PixelNet Window

5—Client Menu and Tool Bar

5.3.7.1 Video Source Properties

When you select **Properties** with a Video window selected, you will see the following property dialog displayed.

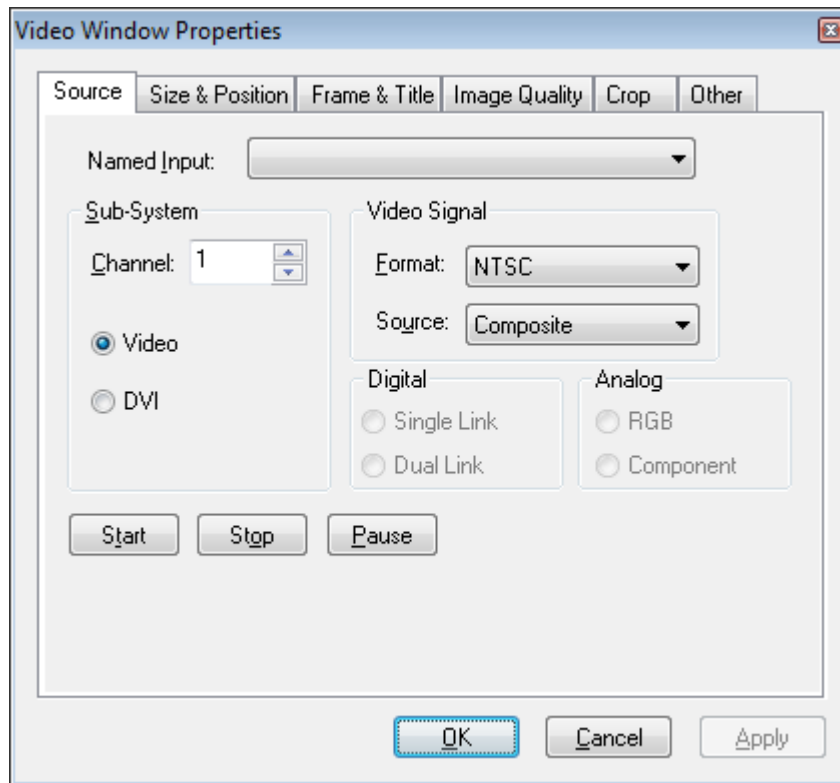


Figure 62 - Video Source Properties—Source Tab

Channel

The **Channel** spinner allows you to select the input channel. The input **Channel** refers to the physical input connector number on the chassis Rear Panel (Refer to the **Hardware Manual** of the related Fusion system for more information). Changing the channel activates immediately.

Sub-System

The **Sub-System** radio buttons allow you to select the type of you wish to display in the selected window. Changing the type of window from Video to DVI Capture or from DVI Capture to Video will require you to restart the window (**Start** button).

Window Menu

Note Changing the **Sub-System** type of a window from Video to DVI Capture or from DVI Capture to Video will require you to use the **Start** button to restart the capture process for the window.

Format

The **Format** drop-down list allows you to set the video format used for input for the selected window. Click the down arrow at the right of the list box to drop down the list.

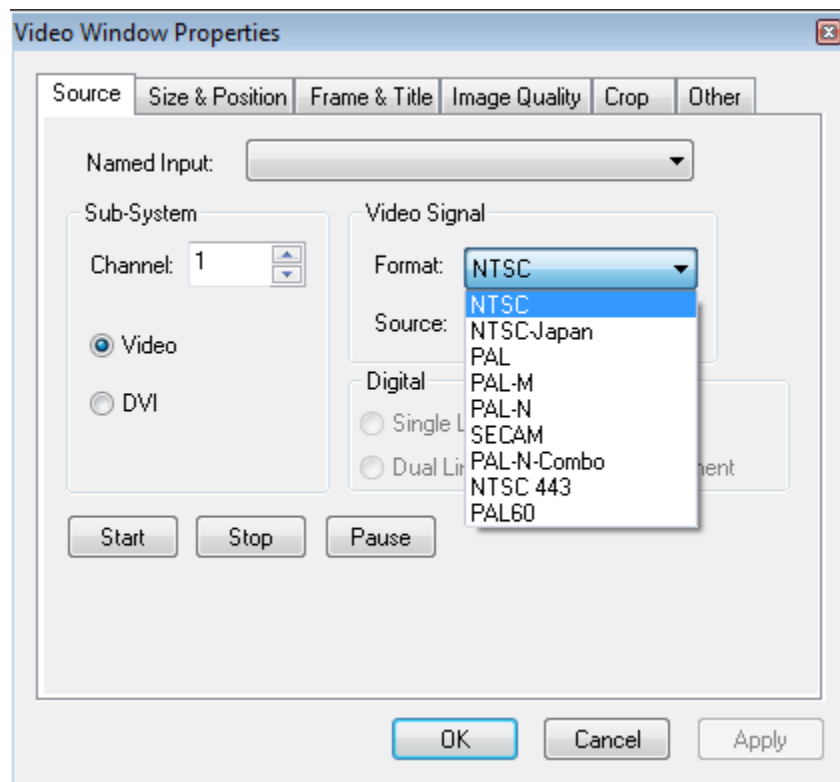


Figure 63 - Format Drop-down List

5—Client Menu and Tool Bar

Source

The **Source** drop-down list allows you to set the video input type used for the selected window. Click the down arrow at the right of the list box to drop down the list.

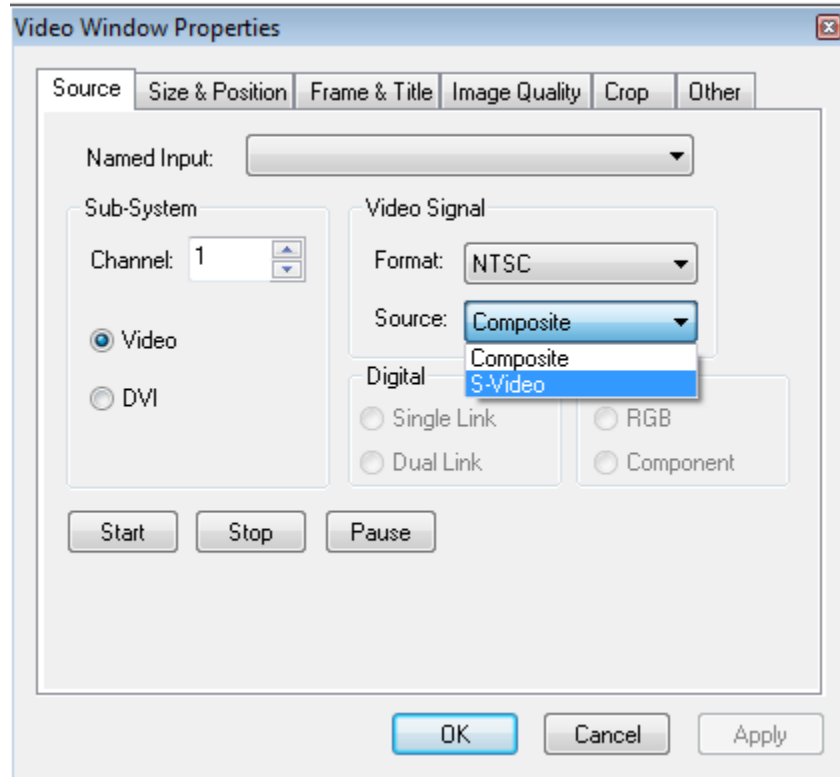


Figure 64 - Video Input—Source Drop-down List

Start

The **Start** button starts the capture (updating) for both Video and DVI windows. **Start** must be used when the **Sub-System** has been changed.

Stop

The **Stop** button stops the capturing (updating) process for both Video and DVI windows. Consequently, the window changes to blue with the window channel displaying the word **Stopped**.

Window Menu

Pause

The **Pause** button acts like the pause button on a VCR, it will stop the update of the information in the window, but display the last video or DVI frame captured.

5.3.7.2 DVI Source Properties

When you select **Properties** with a DVI selected, you will see the following property dialog displayed.

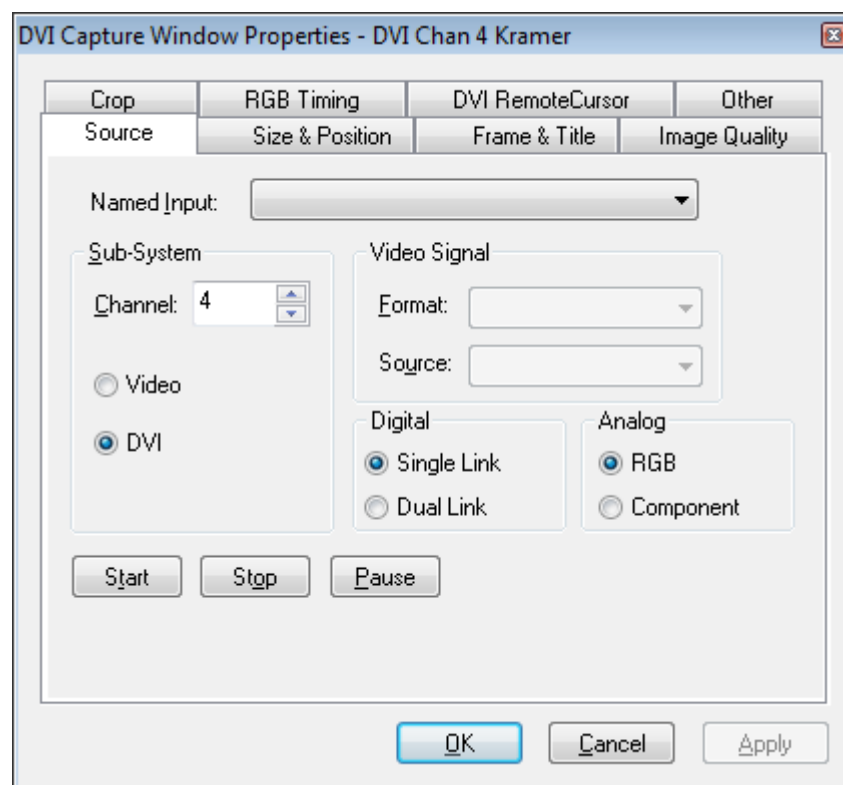


Figure 65 - Source Properties (DVI)

5—Client Menu and Tool Bar

5.3.7.3 VideoStream Source Properties

When you selected Properties with a VideoStream window selected you will see the following property dialog displayed.

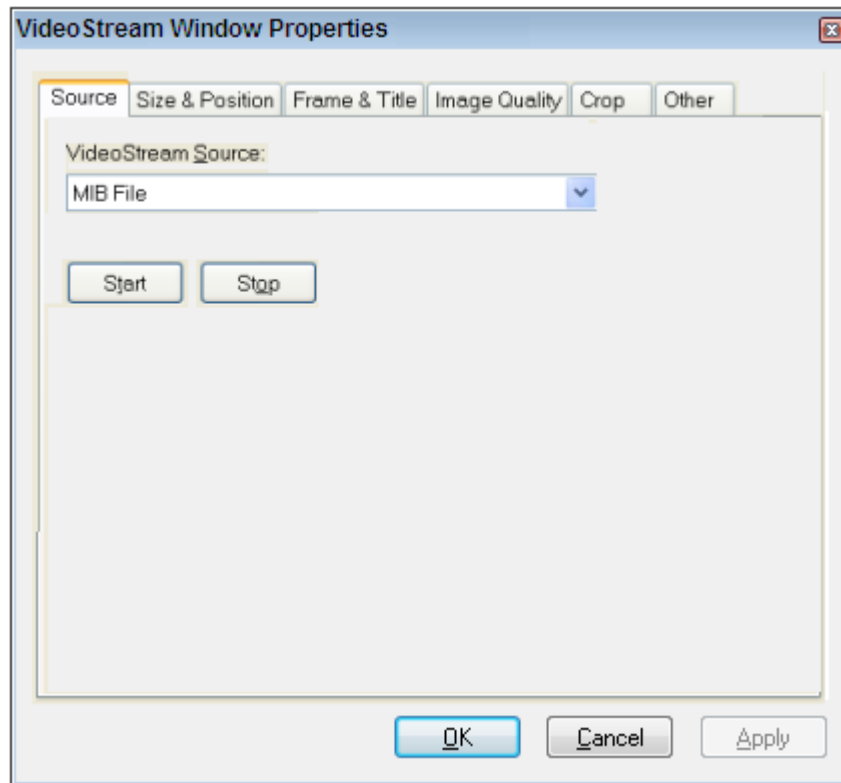


Figure 66 - Source Properties (VideoStream)

VideoStream Source

Click the down arrow to open the **VideoStream Source** list. Select a predefined streaming video source. Please refer to ControlPoint Objects for detailed information.

Start

Click the **Start** button to start the display of the selected VideoStream source.

Stop

Click the **Stop** button to stop the display of the selected VideoStream source.

Window Menu

5.3.7.4 Size & Position Properties

When you click the **Size & Position** tab, you will see the following property dialog.

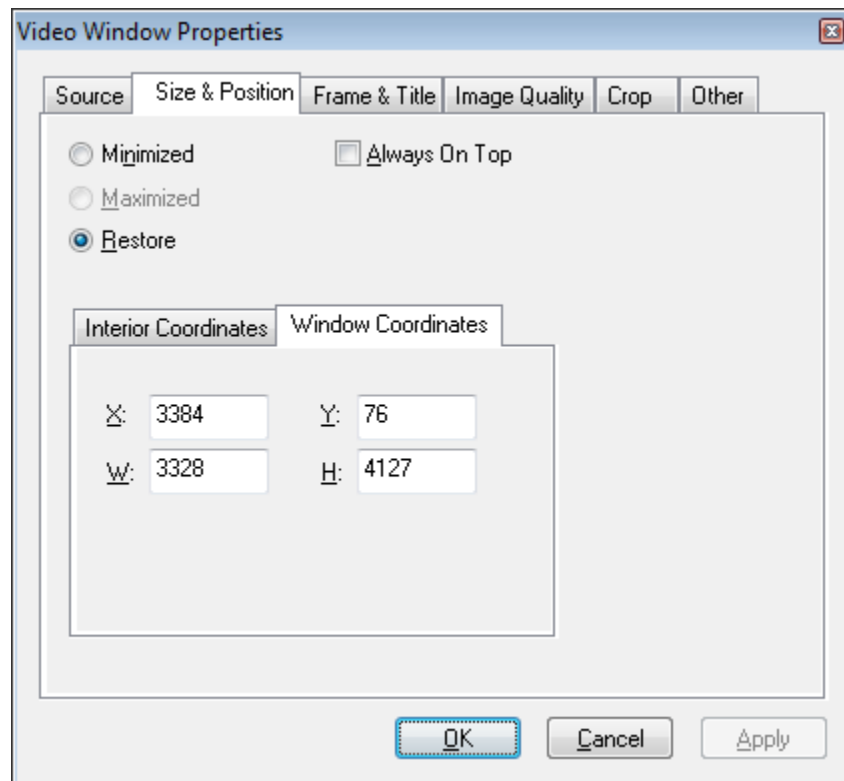


Figure 67 - Size & Position Properties (Video)

Minimized

Minimized will close the window to an icon on the **Task Bar**. This is an immediate action.

Maximized

Maximized will make the window full screen. This is an immediate action. **Maximized** is not active (grayed out) for Video Windows as shown in **Figure 67**.

Restore

Restore will restore a **Minimized** or **Maximized** window to the previous size and position. This is an immediate action.

5—Client Menu and Tool Bar

Always On Top

ControlPoint maintains two separate Z-order stacks of windows – top-most and non-top. Windows from the top-most stack are always on top of non-top windows. Normal windows, as created by Windows or ControlPoint, are placed into the non-top stack. To promote a window to the top-most stack, check the **Always On Top** check-box. This effectively puts the window on top of all non-top windows.

Bring on top and **Send to back** commands work relative to the stack of the window. For example, **Bring on top** for a non-top window will put the window on the top of the non-top stack, but still it will be below all top-most windows. Respectively, **Send to back** for a top-most window puts the window to the Bottom of the top-most stack, but still above all non-top windows.

Window Menu

Interior and Windows Coordinates

Interior Coordinates define the interior (image area) of the window.

Window Coordinates define the exterior of the window, the total window rectangle including the title frame.

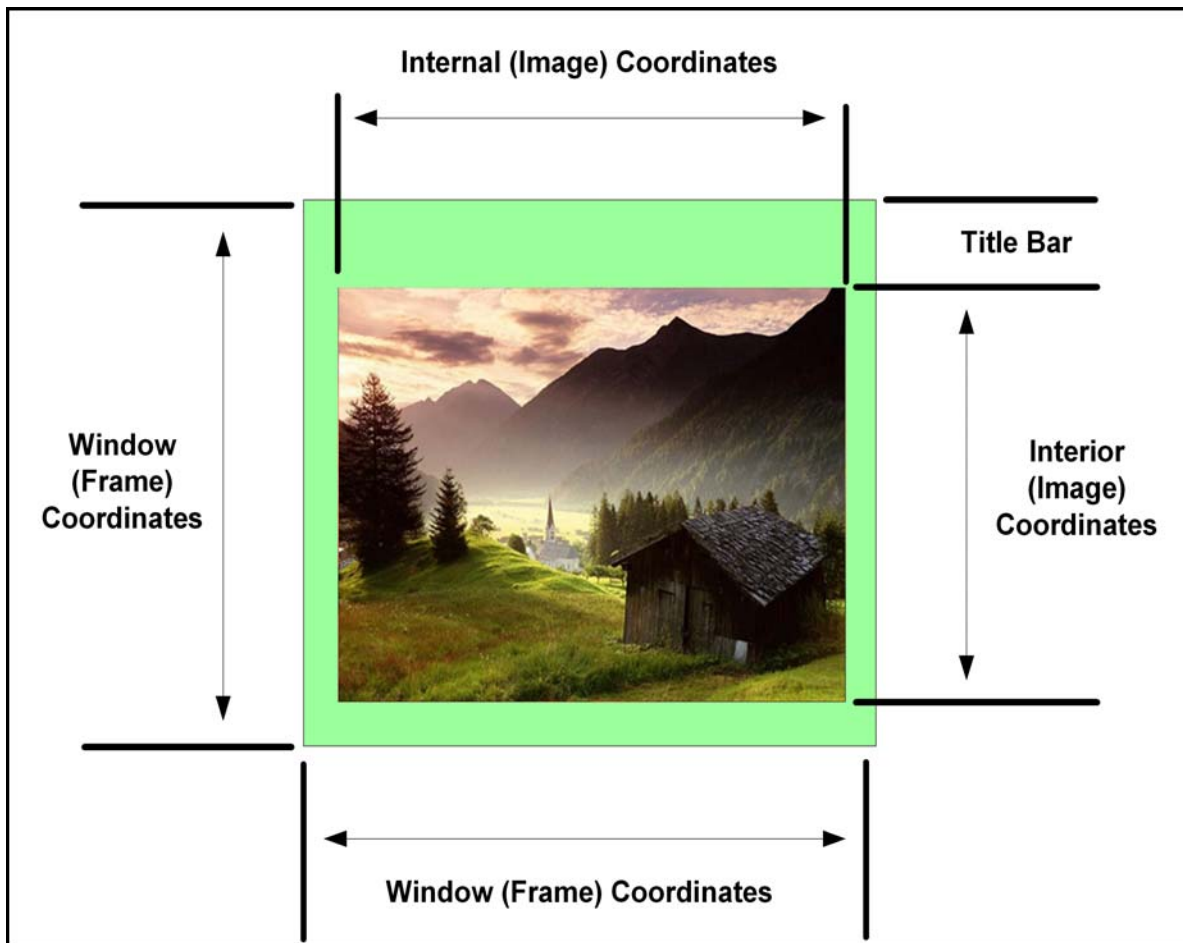


Figure 68 - Interior and Windows Coordinates

5—Client Menu and Tool Bar

Size & Position - Interior Coordinates

Interior Coordinates define the interior (image area) of the window. Click on the **Interior Coordinates** tab to enter the position and size for the selected window. The coordinate set (X, Y) define the position of the image from the upper left corner of that image. The size (W, H) is the image size without the window frame and title.

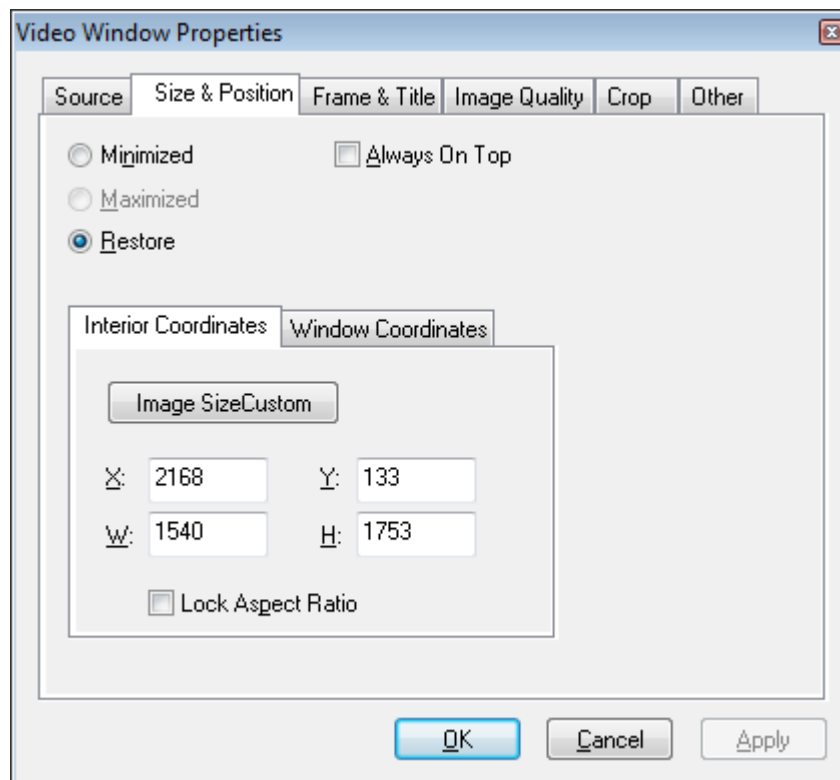


Figure 69 - Size & Position – Interior Coordinates (Video)

Image SizeCustom

The **Image SizeCustom** button allows you to select a specific size for your window from a set of predefined sizes based on the standard size of that window. When you click the **Image Size** button, you will see the list shown below. As you select a desired size, the system will apply the new setting automatically.

Window Menu

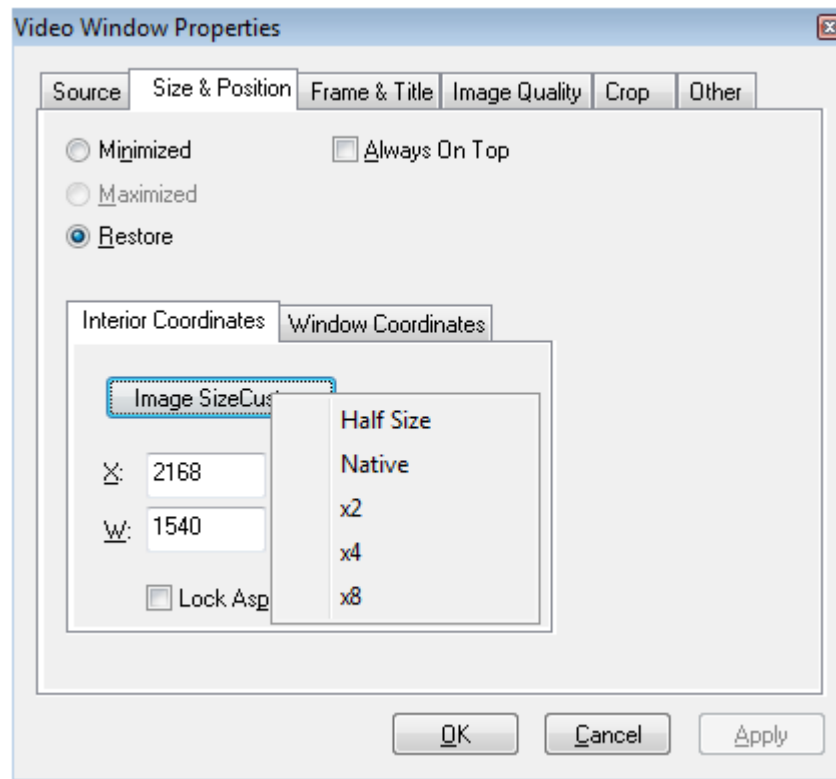


Figure 70 - Size & Position – Image SizeCustom

Table 6: Video Window Size by Format

	Half	Normal	2x	4x	8x
NTSC	320X240	640X480	1280X960	2560X1920	5120X3840
PAL	384X288	768X576	1536X1152	3072X2304	6144X4608

Note The **Predefined Sizes** are scaled from the original image. The size of the image is dependent upon the type of signal, video format for Video and the source resolution for DVI. Also, no image can be scaled larger than the available desktop area.

5—Client Menu and Tool Bar

Position X

The **X** box displays the current position of the **selected** window and allows you to type a specific X position for that **selected** window. Click the **Apply** button to activate the change.

Position Y

The **Y** box displays the current position of the **selected** window and allows you to type a specific Y Position for that **selected** window. Click the **Apply** button to activate the change.

Size - Width

The **W** box displays the current width of the **selected** window and allows you to type a specific Width for that **selected** window. Click the **Apply** button to activate the change.

Size – Height

The **H** box displays the current width of the **selected** window and allows you to type a specific Height for that **selected** window. Click the **Apply** button to activate the change.

Lock Aspect Ratio

Lock Aspect Ratio forces the window to preserve its current aspect ratio when resized; it locks the aspect ratio of the interior (the image portion). Note, that when this is enabled, the **current** aspect ratio of the window at the time of the operation is used and preserved from then on. **Lock Aspect Ratio** preserves the destination window aspect ratio, not the aspect ratio of the source signal. To lock the aspect ratio to the source signal, uncheck **Lock Aspect Ratio**, select **Normal** or **Half Size**, then select **Lock Aspect Ratio**.

Note	Selecting Lock Aspect Ratio locks the current aspect ratio (even if incorrect). Select Normal , then lock aspect ratio, and then set the size of your window.
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Size & Position - Window Coordinates

Click on the **Window Coordinates** tab to view the position and size for the selected window. The Coordinate set (X, Y) control the position of the window relative to the top left corner of the window. This will include the Frame and Tile if one is applied. If no **Frame** is applied, the **Internal** and **Window Coordinates** will be the same. The size of the window is controlled by the W (width) and H (height) of the window including the frame.

Window Menu

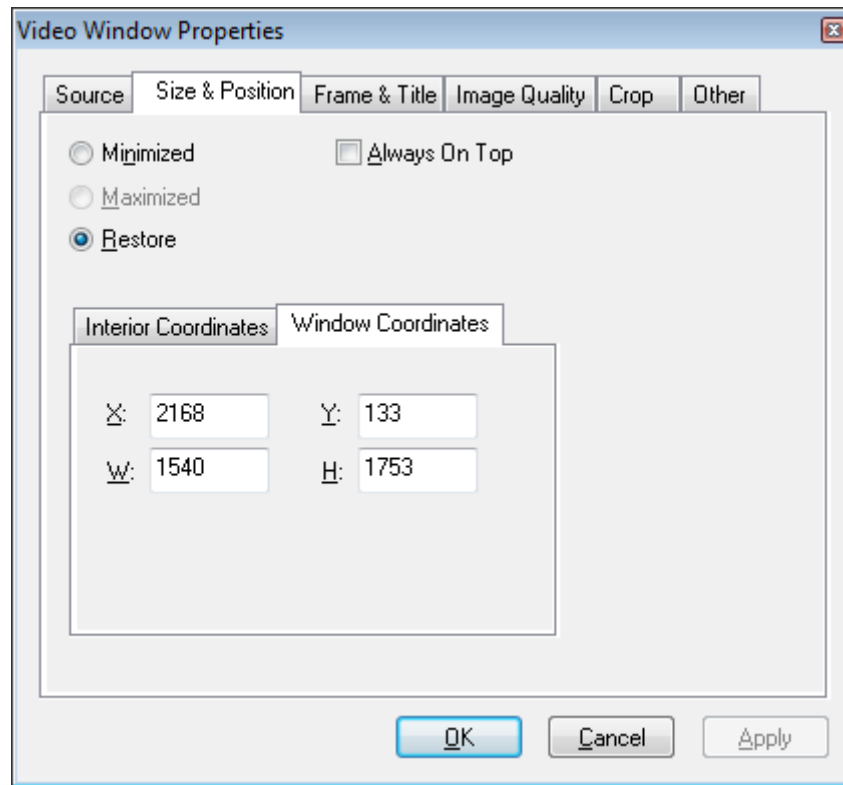


Figure 71 - Size & Position – Window Coordinates (VideoStream)

Position X

The **X** displays the current position of the **selected** window and allows you to type a specific X position for that **selected** window. Click the **Apply** button to activate the change.

Position Y

The **Y** displays you the current position of the **selected** window and allows you to type a specific Y Position for that **selected** window. Click the **Apply** button to activate the change.

Size - Width

The **W** box displays the current width of the **selected** window and allows you to type a specific Width for that **selected** window. Click the **Apply** button to activate the change.

5—Client Menu and Tool Bar

Size – Height

The **H** box displays the current width of the **selected** window and allows you to type a specific Height for that **selected** window. Click the **Apply** button to activate the change.

5.3.7.5 Frame & Title Properties

Click the **Frame & Title** Properties tab to display the following dialog in [Figure 72](#). Note that some functions are instantaneous while others require you to click the **Apply** button to activate the changes.

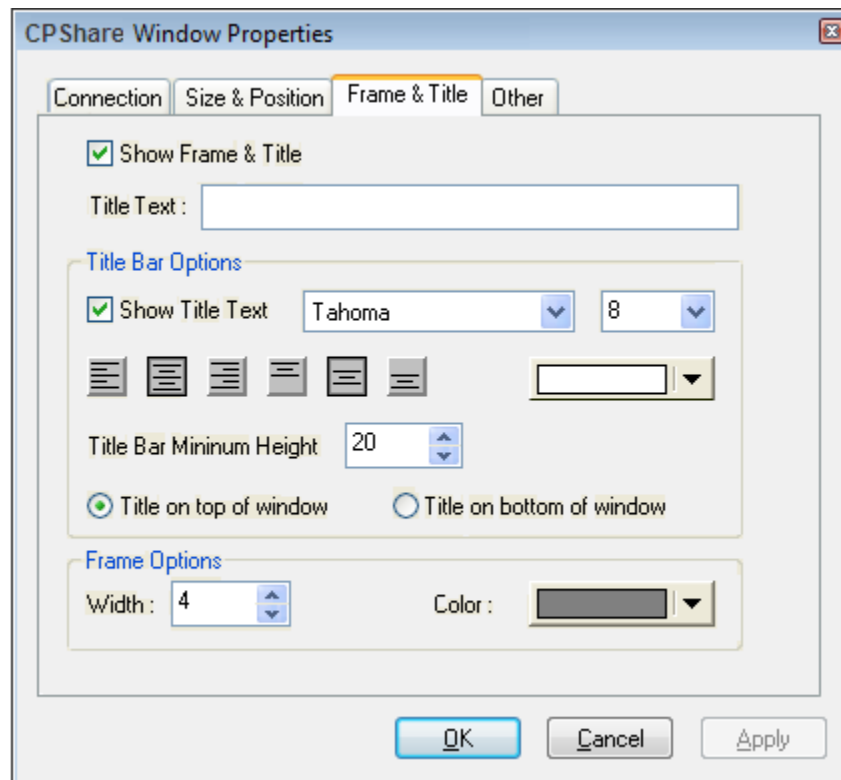


Figure 72 - Frame & Title Options

Window Menu



Figure 73 - Default Window Frame

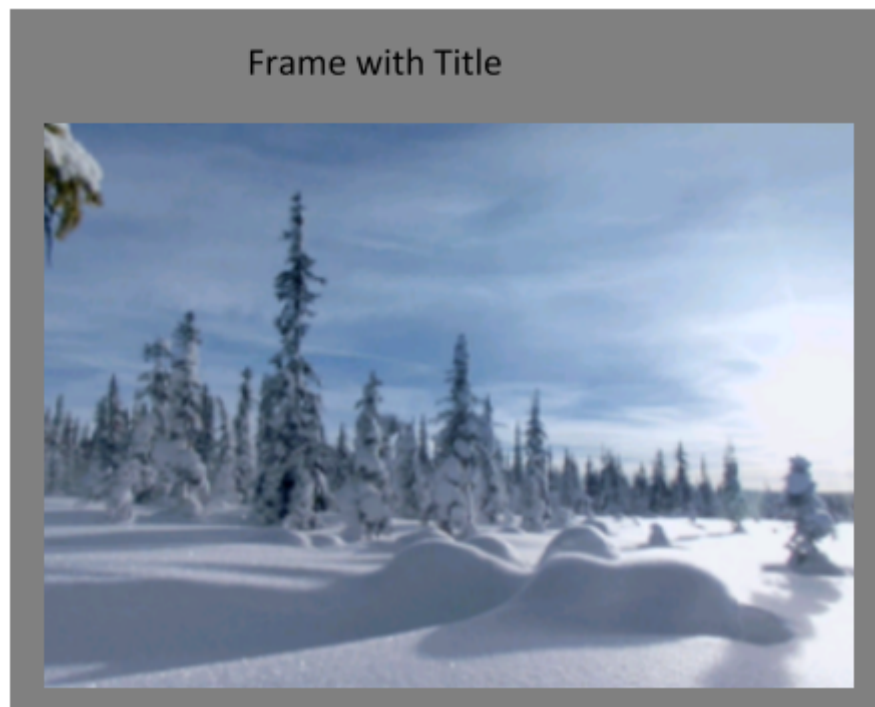


Figure 74 - Default Window with Frame and Title

5—Client Menu and Tool Bar

Show Frame & Title

Check this box to display the Frame and Title on the window. Uncheck this box to disable the frame and title for the window. [Figure 73](#) shows a window with a default Frame. [Figure 74](#) shows a window with a default Frame and Title.

Title Text

Type in the desired text for the window title.

Title Bar Options

Select a desired font name for the title text.

Show Title Text

Check this box to display the Title on the window.

Font

Select a desired font name for the title text.

Font Size







Select a desired font size for the title text.

Window Menu

Text Alignment

Click the buttons to set the text alignment on the title bar.

Table 7: Text Alignment

	Left Justified
	Horizontal Center Justified
	Right Justified
	Top Justified
	Vertical Center Justified
	Bottom Justified

Text Color

Click on the arrow to select a desired color for the title text. You will see a drop down dialog for color selection.

Title Bar Minimum Height

Select a desired number of pixels for the minimum height of the title bar. If the selected font size is larger than the minimum height of the title bar the title bar will adjust to accommodate the larger text.

Title on top of the window

Sets the title bar on the top of the selected window.

5—Client Menu and Tool Bar

Title at bottom of the window

Sets the title bar at the bottom of the selected window.

Frame Options

Width

Select the width of the frame.

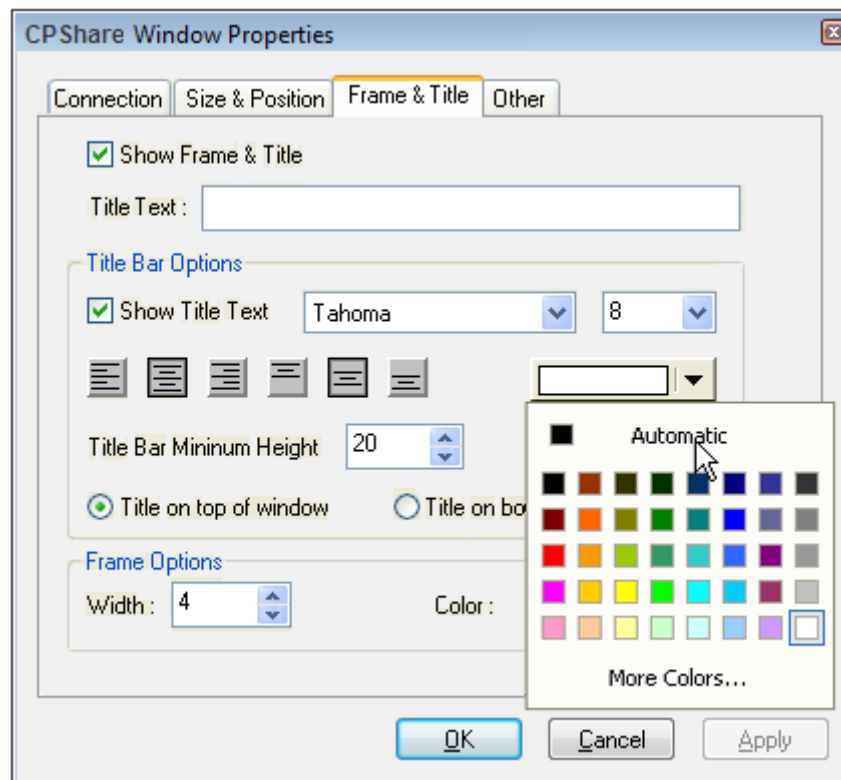


Figure 75 - Frame Options - Color

Apply

Note that some functions are instantaneous while others require you to click the **Apply** button to activate the changes.

Window Menu

5.3.7.6 Image Quality Properties

Selecting the **Image Quality** Properties tab displays one of the following three property dialogs. The [Figure 76](#) is for a **Video window**; [Figure 77](#) is for a **DVI window**, and [Figure 78](#) is for a **Streaming window**.

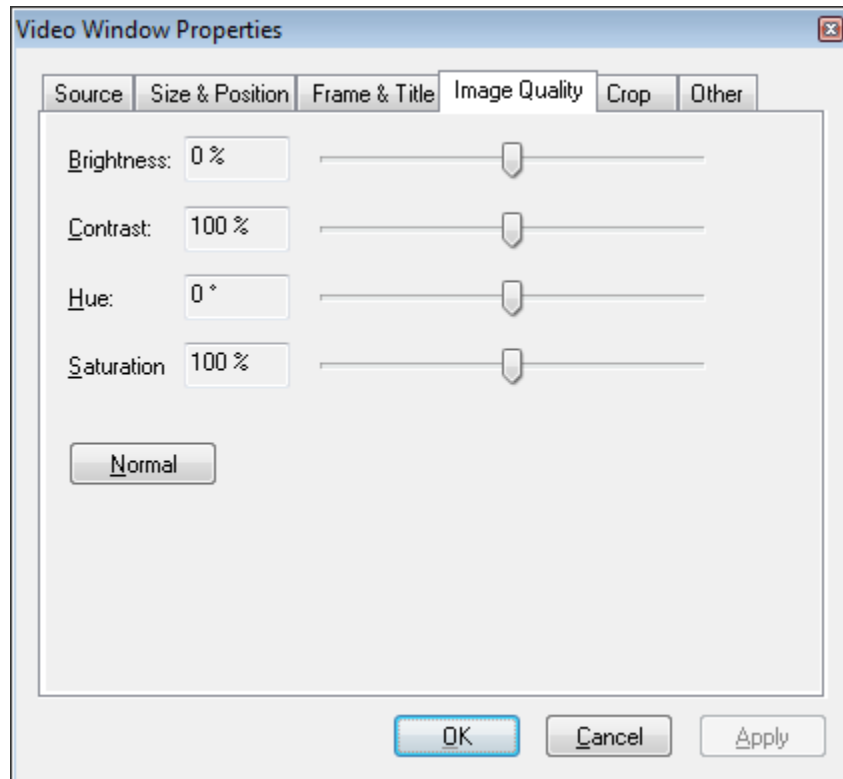


Figure 76 - Image Quality Properties (Video)

5—Client Menu and Tool Bar

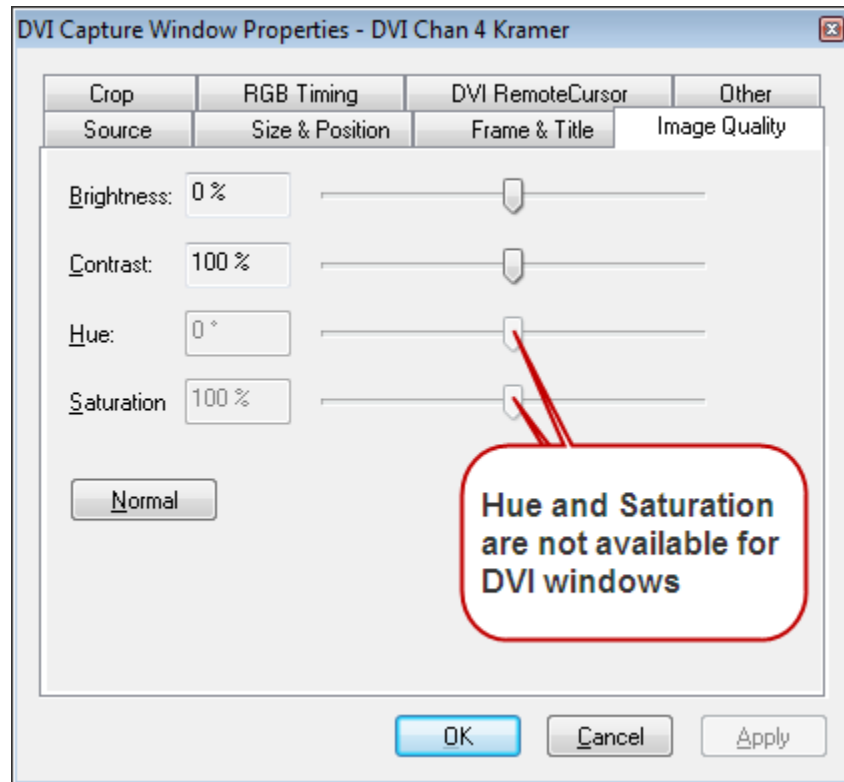


Figure 77 - Image Quality Properties (DVI)

Window Menu

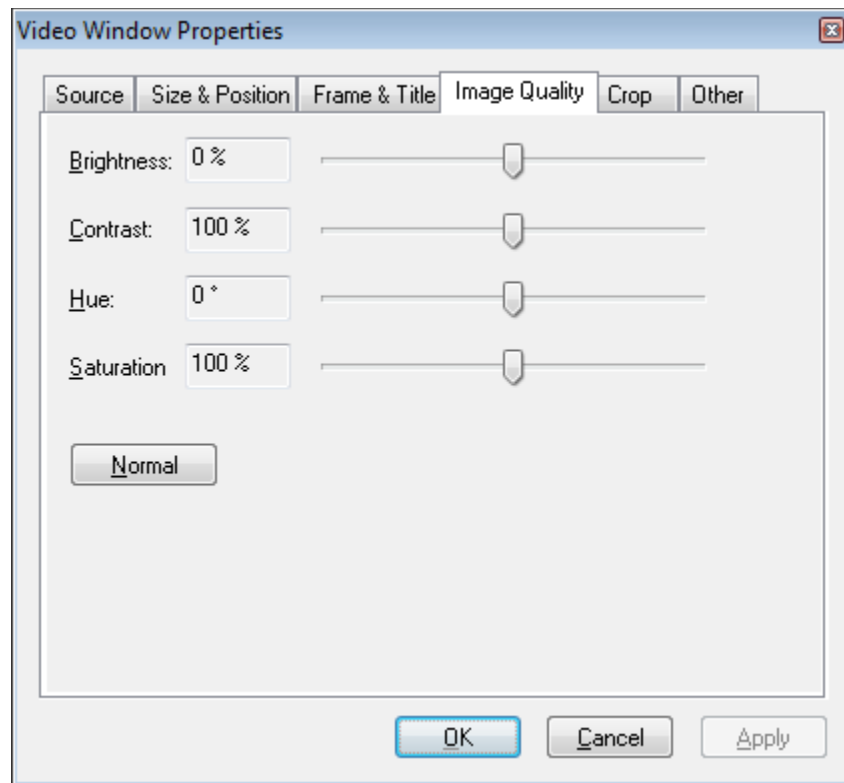


Figure 78 - Image Quality Properties (VideoStream)

Brightness

Set the desired image **brightness** by clicking on and selecting the **Brightness** slider control. **Brightness** can be set from -100 to +100%. **Brightness** changes the image from a very bright image on one end to a very dark on the other end.

Contrast

Set the desired image Contrast by clicking on and selecting the **Contrast** slider control. **Contrast** can be set from 0 to 200%. **Contrast** changes the difference between the lightest and darkest areas of your image from a washed out to a very harsh image.

Hue

Set the desired image **hue** by clicking on and selecting the **Hue** slider control. **Hue** can be set from -180 to +180 degrees. **Hue** changes the color balance of your image from green on one end to purple on the other end. Adjust **Hue** for the best skin tones if you are viewing people, or the most natural looking image. Hue is not supported under the PAL format, is not available as an option for DVI windows, and is not available from VideoStream decoders.

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Saturation

Set the desired image **saturation** by clicking on and selecting the **Saturation** slider control. **Saturation** can be set from 0 to 200.

Saturation changes your image from no color (black and white) to very saturated colors. Set the saturation for a normal representation of your image. Skin tone, if available, is a good reference. **Saturation** is not available as an option for DVI windows.

Normal

The **Normal** button will load basic control default values as shown in the **Default** column of the following table.

Table 8: Image Quality Values

Parameter	Min.	Default	Max.
Brightness	-100%	0	+100%
Contrast	0%	100	200%
Hue	-180°	0°	+180°
Saturation	0%	100	200%

Window Menu

5.3.7.7 Crop Properties

Selecting the **Crop** Properties tab, displays the following property dialog. The **Crop** property allows you to crop (remove) areas from Video, DVI, and VideoStream images, zoom into that image, and pan around to view all areas of an image. Areas can be cropped separately from the top, each side, and the bottom of the image.

A specific area of the image can be selected by drawing a box around it. You can then pan to see all areas of that image (zoom/pan).

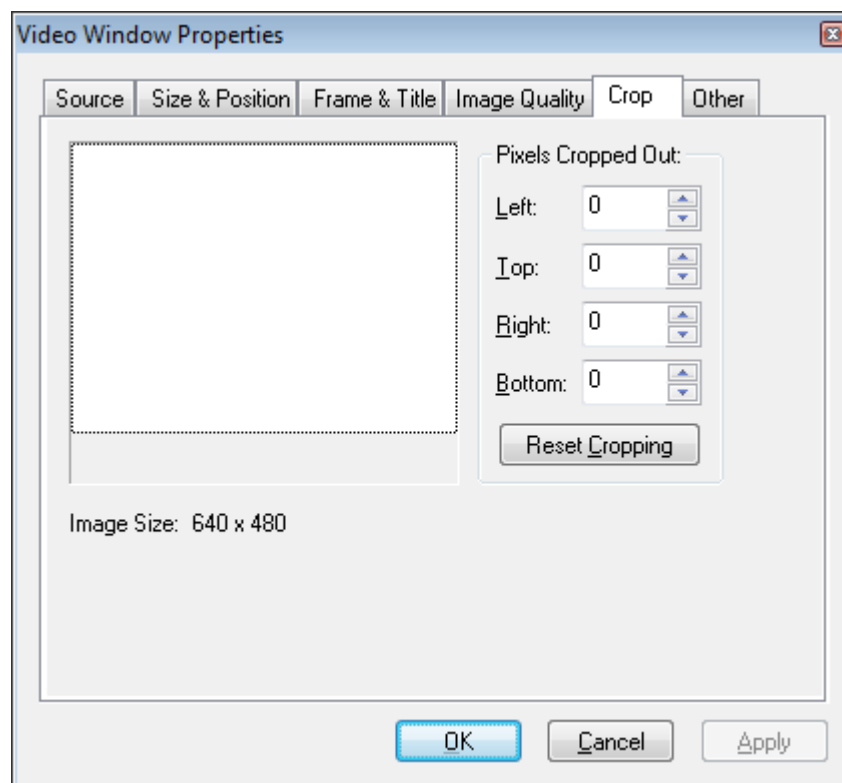


Figure 79 - Cropping Properties for Video and DVI

Some DVD players will show two or three lines of non-video data at the top of the screen. This changing color pattern of data can be distracting. You can crop these lines out by entering the number of lines into the **Top** box.

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Using Crop

The **Pixels Cropped Out** box allows you to enter specific values. **Top** and **Bottom** boxes will represent **lines** cropped, while the **Left** and **Right**, boxes will represent **pixel columns** cropped. The **Crop** function is instantaneous and does not require **Apply**. The **Reset Cropping** button will return all values to zero.

If you are playing a DVD that has the letter-box (16:9) aspect ratio you will see the black area above and below the image in the Video window. These black areas can be cropped out with the **Crop** function. Just enter the number of lines into the **Top** and **Bottom** boxes to crop out those areas. The window must then be resized (stretched) to a 16:9 aspect ratio.

Selecting an Area

You can select an **area** to view (crop out an area from all four sides) by using the cross hair cursor. Click and drag to define an area to view. This can be used as a zoom function ("**Zoom**" on page 96). Once you let go of the mouse after your drag operation, the image will scale to fill the image window area immediately.

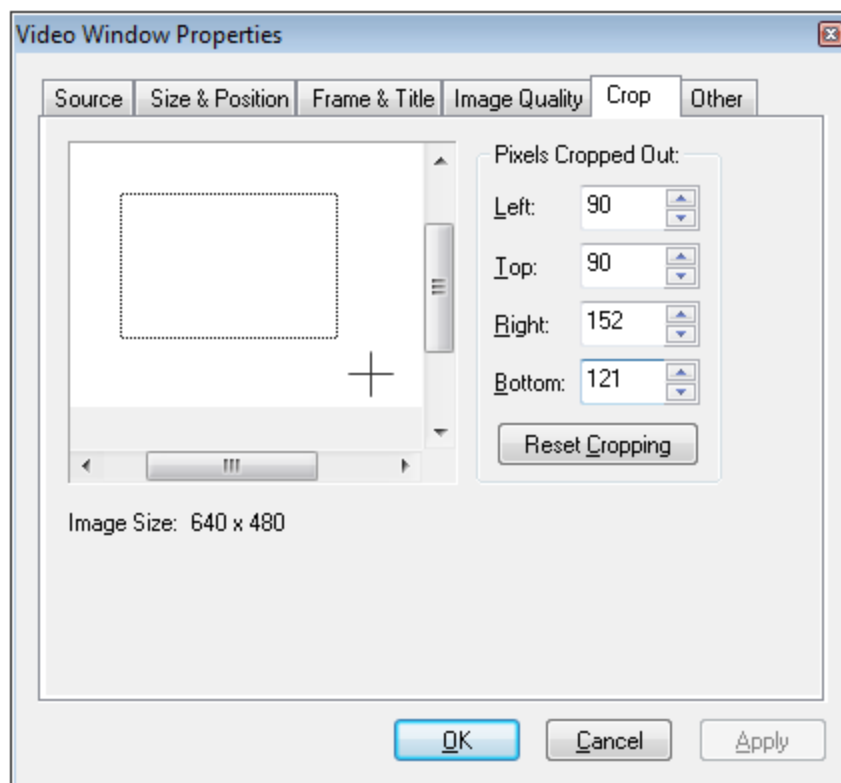


Figure 80 - Selected Crop Area

Window Menu

When areas are cropped from the image, a medium gray box in the image screen area defines the visible area from the cropped area.

The following figure shows the gray square defining the visible and cropped areas. Areas have been cropped from all sides of the image in this example.

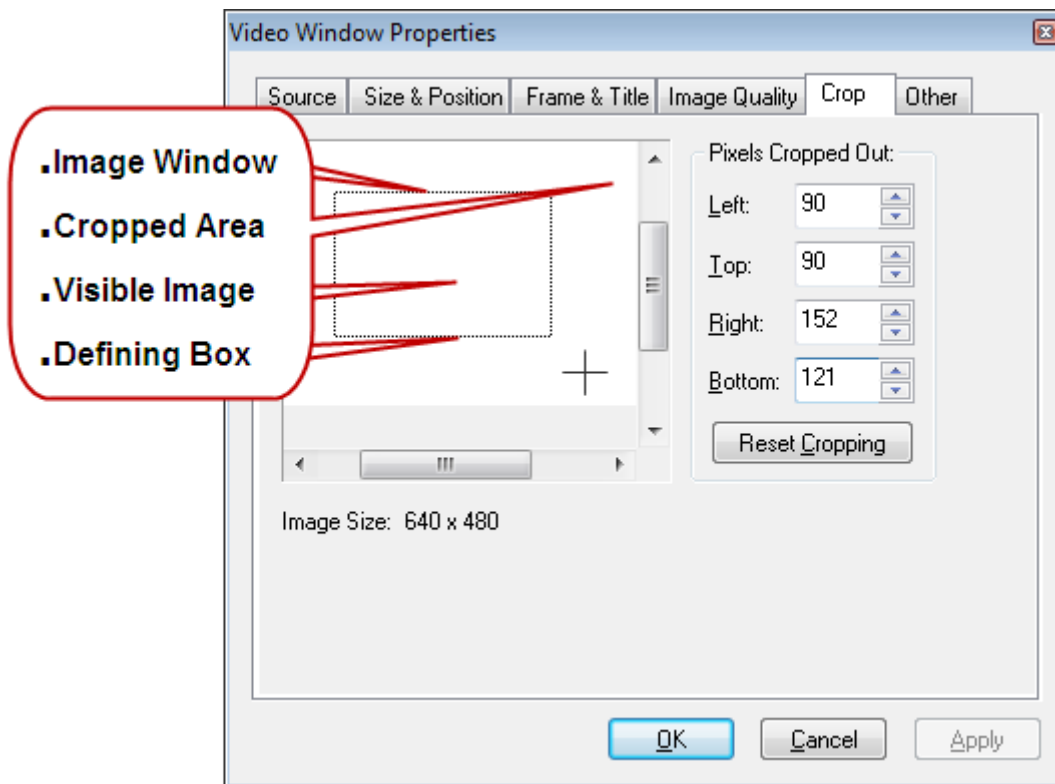


Figure 81 - Cropped Area

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Zoom & Panning

Once an area has been cropped, you can move (pan) the image around within the window area. You can do this by moving the Scroll Bars (or sliders) at the right and bottom of the image area (refer to figure below)

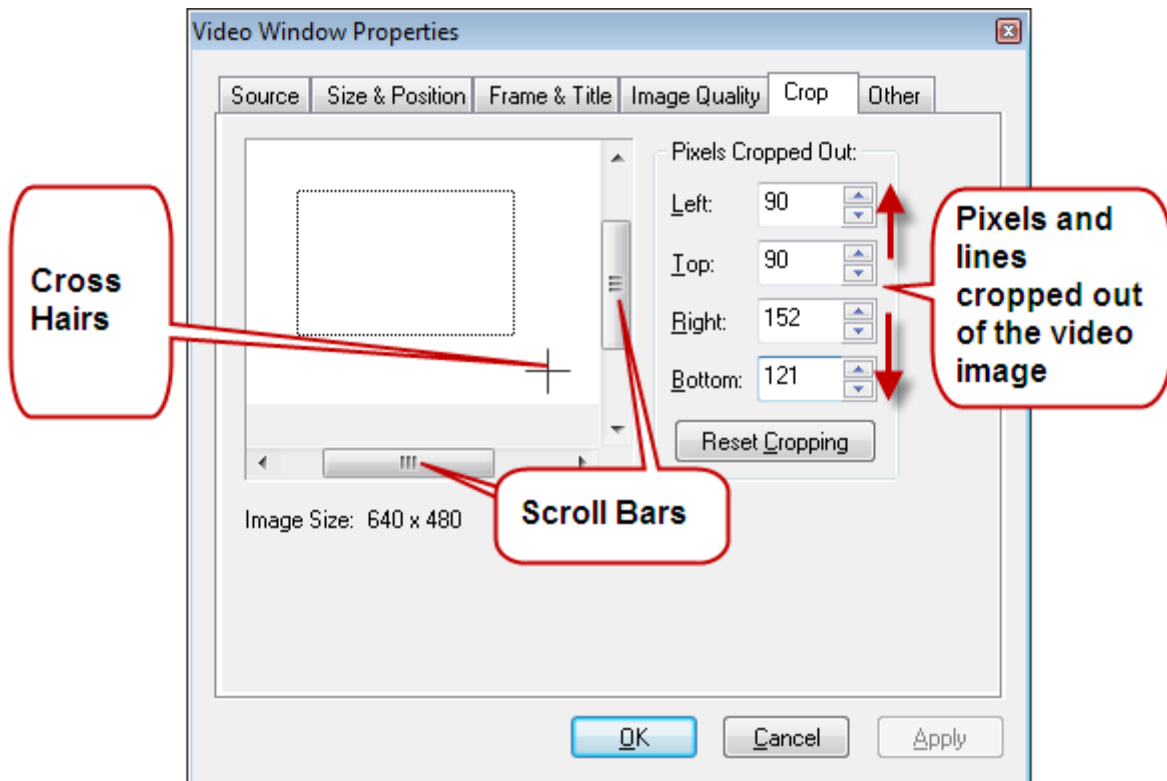


Figure 82 - Panning the Cropped Area

Zoom

You can affect a **Zoom** function by using the cross hair cursor to select a small area of the image (refer to **Selecting an Area above**). Once you let go of the mouse button at the completion of your area selection, the image will scale to fill your the window area. You can now use the **Pan** function to view different areas of the image (refer to **Panning above**) be aware that you can zoom an image too much to be able to see anything worthwhile in the image (except the pixels you have zoomed into).

Note	If you zoom into an image too much, you will distort the image beyond the ability to see any detail at all except individual image pixels.
-------------	--

Window Menu

Pixels Cropped Out

The **Pixels Cropped Out** box allows you to enter the specific number of pixels or lines to remove from the top, bottom, or either side of the image. Enter the number needed. These entries cause immediate action.

Image Size

The **Image Size** reflects the standard image size of the input source. This is either the DVI source or the Video source specified **Signal Format**. Standard image sizes are 640x480 for NTSC and 768x576 for PAL.

Reset Cropping

The **Reset Cropping** button resets all **Pixels Cropped Out** values to zero.

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5.3.7.8 Timing Properties

Click the **Timing** tab, to display the following property dialog.



Figure 83 - Timing Properties

Note Vertical timing (height) is expressed in lines, while horizontal timing (width) is expressed in pixels. All timing is based on standard VESA timing charts.

Window Menu

Note	Adjusting the Horizontal Total will change the Pixel Clock . Pixel Clock is defined as: $\text{PIXEL_CLOCK} = \text{VERTICAL_REFRESH}$ * VERTICAL_TOTAL * HORIZONTAL_TOTAL
-------------	---

Considerable image quality may be gained by adjusting these controls. Adjust the image to fill the window fully and then adjust the **Phase** to adjust for image quality. All controls require clicking the **Apply** button to activate the change.

Vertical – Total

The **Vertical Total** parameter adjusts the total vertical timing. **Vertical Total** includes both the visible pixels and the retrace (or blanking) time.

Vertical – Offset

Vertical Offset has a range of from 1 to 200 and has the effect of **positioning** the screen image vertically within the DVI window. This control allows you to move the image up and down within the window.

Vertical – Height

The **Height** parameter adjusts the **displayed** number of lines. The **Height** parameter usually will **not** need to be adjusted, except for an unusual signal. **Height** has a range of from 1 to 1200. Adjustment above the automatic setting (i.e. 640x480) will try to display lines (i.e. 480 + (n)) that may not be available to be displayed. In most cases, you will display blank lines in the blanking or sync area of the signal.

Horizontal – Total

The **Horizontal Total** parameter adjusts the total number of pixels in a line. **Horizontal Total** includes both the visible pixels and the retrace (or blanking) time.

Horizontal – Offset

Horizontal Offset has a range of from 1 to 1600 and has the affect of **positioning** the screen image horizontally within the DVI window. This control allows you to move the image back and forth sideways within the window.

Horizontal – Width

The **Width** parameter adjusts the **displayed** number of pixels. The **Width** parameter usually will **not** need to be adjusted, except for an unusual signal or image shape. **Width** has a range of from 1 to 1600. Adjustment above the automatic setting (i.e. 640x480) will try to display pixels (i.e.

5—Client Menu and Tool Bar

640 + (n)) that may not be available to be displayed. In most cases, you will display blank pixels in the blanking or sync area of the signal. The purpose of this adjustment is to fill the window with the graphics information.

Sync Type

Sync Type shows you what type of sync pulse is detected either automatically or when the **Detect Timing** button is used. You will generally never need to set the sync type. Sync types are shown below:

- On H pin - Sync on Horizontal pin
- On Green - Sync on Green
- Separate - Horizontal on H pin, Vertical on V pin
- On V Pin - Sync on Vertical pin

The table below shows on what connector pin you will find the sync signal for the various sync types shown. DVI cables can be purchased with 3, 4 or 5 BNC connectors for sync on green, sync on H or V, and separate sync types (respectively). All except **Separate** are composite sync types. Refer to the **Hardware Manual** of the relevant Fusion system for pinout information about the VGA or DVI-I connectors.

Table 9: Sync Type

	Separate	On Green	On H pin	On V pin
H Sync	H pin	G pin	H pin	V pin
V Sync	V pin	G Pin	H pin	V pin

Phase

Phase adjusts the sample time on the pixel clock. **Phase** has a range of from 0 to 31. Use **Phase** to adjust the quality of your captured image. A phase image should be displayed on the source system for this adjustment.

Vertical Refresh

Vertical Refresh sets your scan rate. This setting has a range of from 0 to 120 Hz. You will usually not need to set this, as it is set from the input signal.

Polarity

The **Negative VSync Polarity** (vertical sync) check box sets the polarity of the vertical sync pulse to a negative value. This check box will be checked automatically if the software detects a negative sync pulse.

Window Menu

The **Negative HSync Polarity** (horizontal sync) check box sets the polarity of the horizontal sync pulse to a negative value. This check box will be checked automatically if the software detects a negative sync pulse.

Auto Detect

The **Auto Detect** check box allows you to enable or disable automatic detecting of the RGB Timing signals from the source computer. With the **Auto Detect** feature **enabled**, the software will attempt to auto-detect the DVI source timing parameters for a selected DVI window when switching among external signal sources or if the current incoming signal should change or not be readable for a short period of time. **Disabling** the **Auto Detect** feature will force the software to apply the currently selected timing to the window regardless of any changes in, or loss of, the source signal. **Disabling** the **Auto Detect** feature preserves user-set adjustments when losing or switching between external signal sources. You can always do a one- time click of the **Detect Timing** button to force a detection of the current incoming signal timing, but the system will not poll. Once the timing is set, it is not changed automatically, regardless what you do with the input signals.

Detect Timing

Clicking the **Detect Timing** button re-samples the input signal on the currently selected channel and set the timing parameters as best it can. In many cases, this is all that is needed to insure a properly adjusted image in your DVI window. You can always return to default values with this button if you decide **not** keep any adjustment changes you have made.

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5.3.7.9 CPShare Properties

Connection Tab

When you open a new **CPShare** window or select Properties from a **CPShare** window, the following dialog will be displayed.

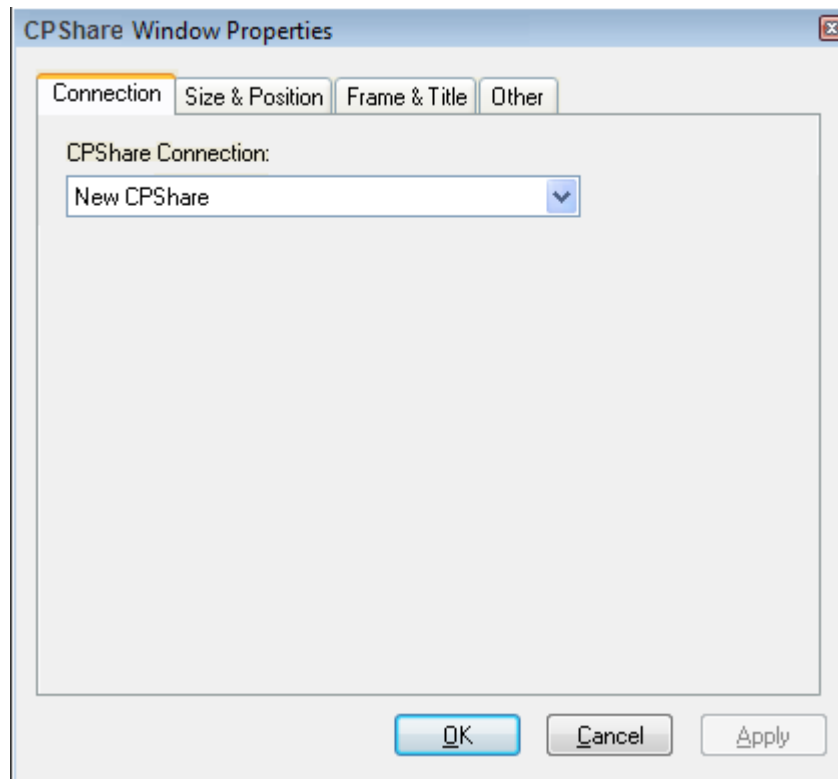


Figure 84 - CPShare Properties

Select a previously configured **CPShare** object from the **CPShare** Connection drop down list. Refer to ["Object Browser" on page 140](#) for detailed information.

Window Menu

5.3.7.10 Web Window Properties

When you open a new Web window or select **Properties** from an existing Web window, the following dialog is displayed. This allows you to input a URL to be displayed in the window.

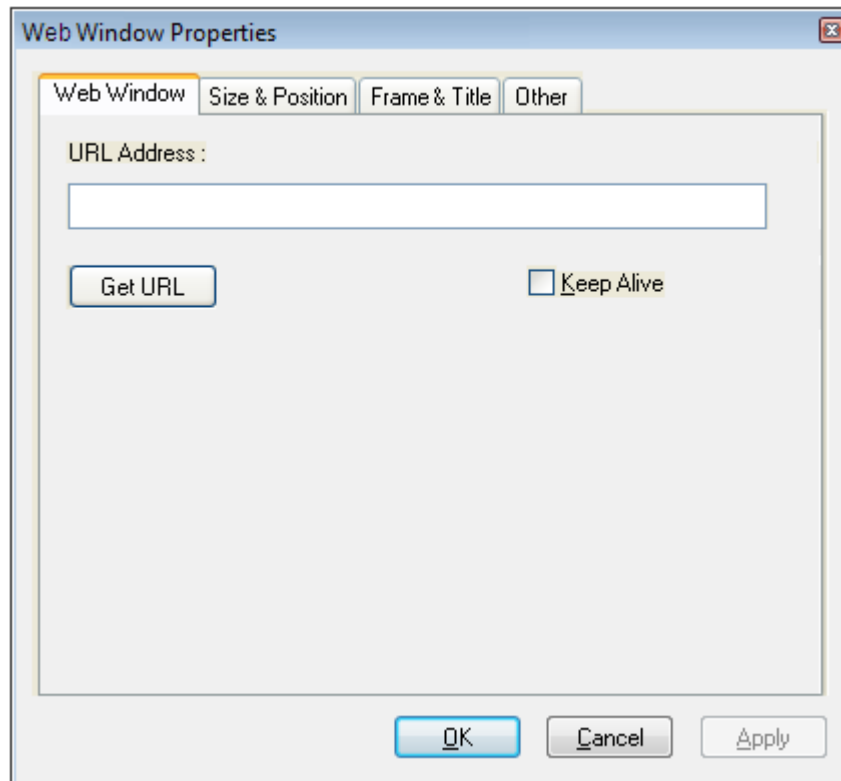


Figure 85 - Properties (Web Window)

Note Web Window uses Internet Explorer HTML rendering engine, hence Internet Explorer is the recommended browser.

URL Address

Enter the URL address for the site or web page you wish to display. Click **Apply**.

Get URL

Clicking the **Get URL** button obtains the current URL address from the Web Window. The result will show in the **URL Address** edit box.

Keep Alive

Check this box to set the Web Window **Keep Alive** state

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Keep Alive instructs ControlPoint not to close the window when the layout is changed. The default action will close all windows in a layout when the layout changes.

Keep Alive for web windows is typically used to avoid the login required every time you open a browser to a page that requires authentication. In this case, the web window stays open when you change to a different layout.

5.3.7.11 PictureViewer Properties

When you open a new PictureViewer window or select **Properties** from an existing PictureViewer window, the following dialog is displayed. This allows you to enter a path to an image on the Wall Controller that will fill the window.

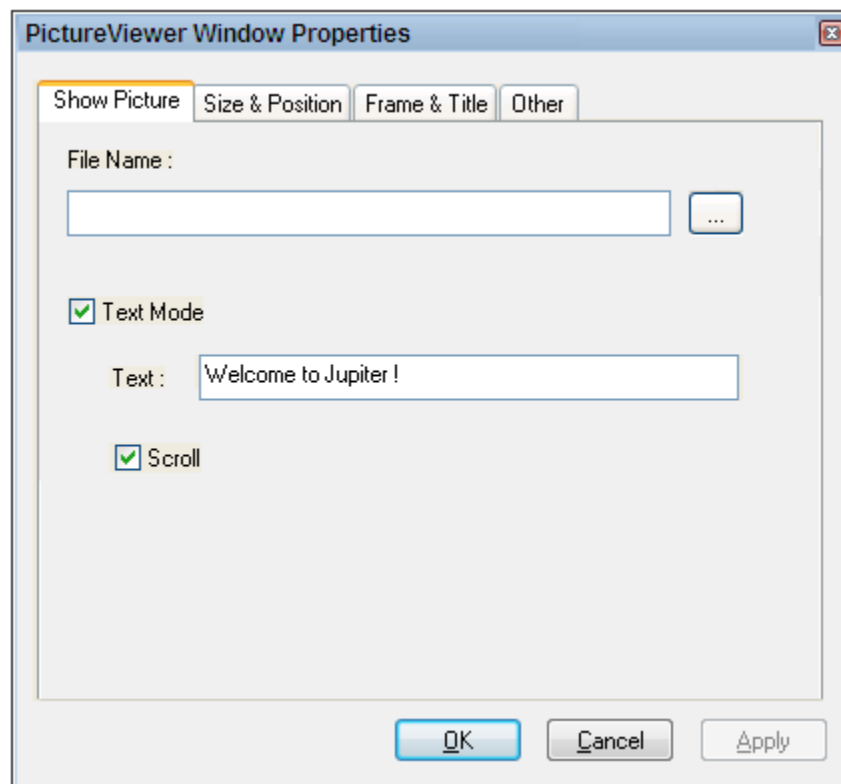


Figure 86 - PictureViewer Properties

Window Menu

File Name

To display an image on the Display Wall, enter a path to an image file stored on the ControlPoint Server. Click the **Apply** button to show the image.

Browse Button

Select the **Browse** button to step through your folders to an image saved on the Wall Controller.

Text Mode

Select the **Text Mode** check box and enter the desired text in the **Text** field. Click **Apply** to apply the text.

Scroll

Select the **Scroll** check box. The text in the **Text** field will scroll immediately.

5.3.7.12 Other (Grab) Properties

Select the **Other** tab to display the dialog shown below:

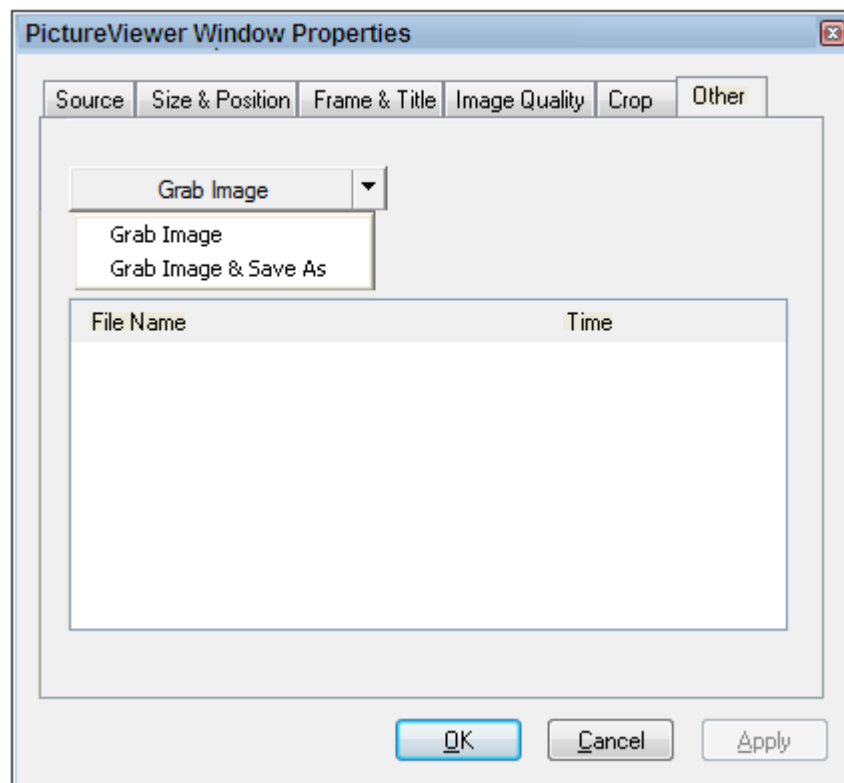


Figure 87 - Properties (Other)

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Down Arrow Button

Click the Down Arrow button to set the state of Grab Image button and the **Grab** button on the ControlPoint Client tool bar. There are two states available: **Grab Image** and **Grab Image & Save As**. The action taken here affects the state of both the **Grab Image** button and the **Grab** button on the ControlPoint Client toolbar. Click **Grab Image** to take a snap shot of the selected window; the image will be saved on the **ControlPoint** server. You can take a snapshot (Grab) any of the windows displayed on the Display Wall. Click the **Grab Image & Save As** button to take a snapshot of the selected window; the image will be saved on the ControlPoint server, and the standard Windows **Save As** dialog will open to prompt you to save the image on the workstation running the ControlPoint Remote Client.

Image List

The **Image List** displays the name and the time the image was saved on the ControlPoint Server, as shown in the figure below.

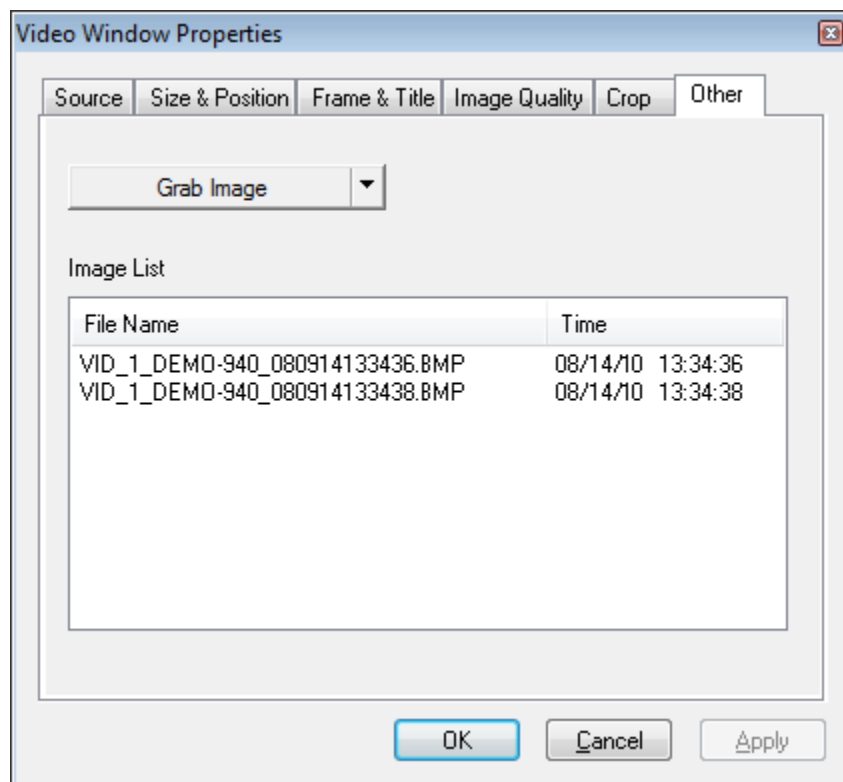


Figure 88 - Grab Image List

If you want to view the Grabbed image files, open the Object Browser and click on the **Image Cache** tab or **Image Cache** item in the **All Objects**

Window Menu

view. Select an image from the list and note the tool bar items that are activated. The three active buttons are **Delete**, **Invoke** (view), and **Save**. **Invoke** opens the Microsoft default Image Viewer with the selected image. Note that if you are viewing from a remote workstation, you cannot use the slide show functions at the bottom of the viewer. The MS Viewer will then display the next available image on the remote system.

Caution Images saved with **Save As** will be saved on the remote workstation as well as on the server.

5.3.7.13 IPStream Properties

The following section discusses the unique properties associated with IPStream.

IPStream Window Properties

When **Properties** is selected with an IPStream window the **Source** Tab is displayed:

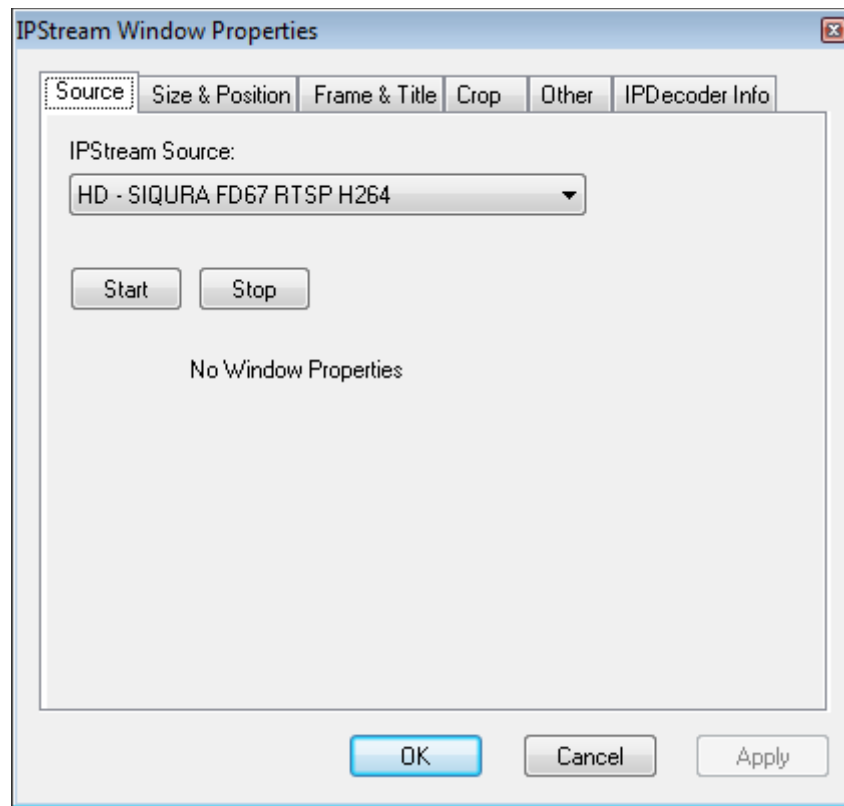


Figure 89 - IPStream Properties

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Source Tab

Start

The **Start** button starts the stream process and the data flow to the window.

Stop

The **Stop** button stops the stream.

IPDecoder Info Tab

The **IPDecoder Info Tab** provides information regarding the **Decoder Channel**, the **Link Status** (corresponds to **Link Up** in the **Quad HD Decoder Configuration Dialog** as described in [page 277](#)), and the **IP Address**.

If the Network Link is up the **Link Status** is **1**. If the Network Link is down the **Link Status** is **0**.

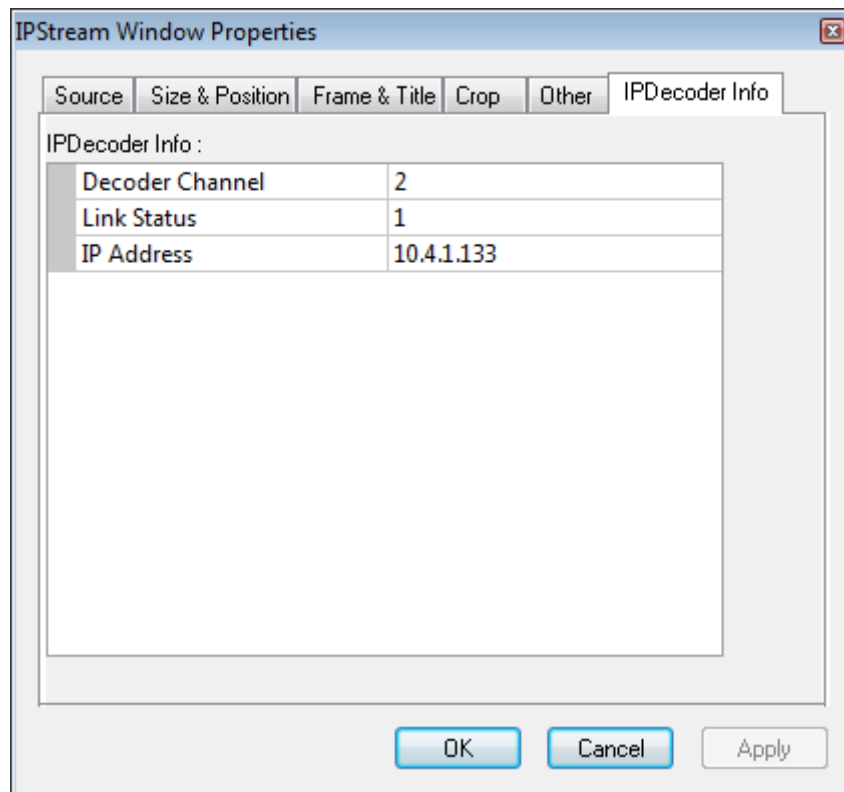


Figure 90 - IPDecoder Info

The other tabs are described in previous sections.

Window Menu

5.3.7.14 PixelNet Properties

The following section discusses the many properties associated with PixelNet when used with a Fusion Wall Controller.

PixelNet Window Properties

Select the **PixelNet** tab, to display the **Properties**, dialog below:

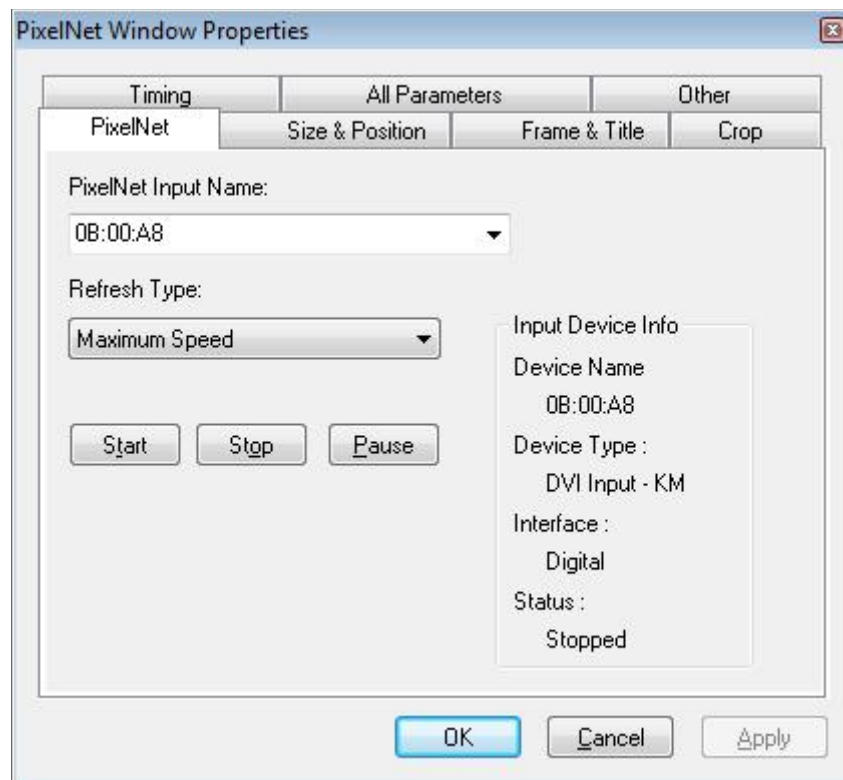


Figure 91 - PixelNet with CatalystLink Properties

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PixelNet Input Name

This **PixelNet Input Name** associates the selected Input Nodes with the window. From the drop-down list, select the desired Input Node to be displayed in the window.

Refresh Type

Refresh Type is enabled for PixelNet windows and selects the window update class. The possible choices are:

Maximum speed - the window is refreshed as fast as possible.

Fast - the window is refreshed at a maximum of 30 fps.

Medium - the window is refreshed at a maximum of 15 fps.

Slow - the window is refreshed at a maximum of 2 fps.

By setting the maximum update rate to **Slow** for windows that are mostly static, the user can optimize the system resources and free up bandwidth for other more critical or graphically intense windows that require a faster update rate.

Start

The **Start** button starts the input capture process and the data flow to the window.

Stop

The **Stop** button stops the input capture process and the data flow to the window.

Pause

The **Pause** button pauses the capture process, freezing the current image in the window.

Input Device Info

Input Device Info displays several items of information about the node. These should be self explanatory.

Window Menu

PixelNet with Timing Properties

Select the **Timing** tab, to display the **Properties**, dialog below: These properties are always read only.

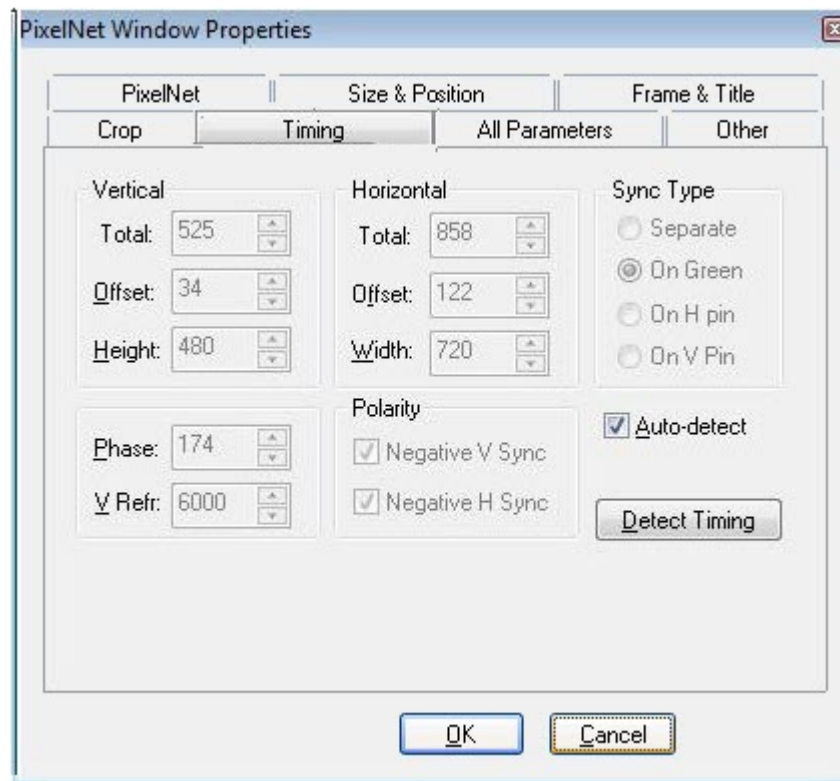


Figure 92 - PixelNet with Timing Properties

Vertical – Total

The **Vertical Total** parameter adjusts the total vertical timing. **Vertical Total** includes both the visible pixels and the retrace (or blanking) time.

Vertical – Offset

Vertical Offset has a range of from 1 to 200 and has the effect of **positioning** the screen image vertically within the RGB window. This control allows you to move the image up and down within the window.

Vertical – Height

The **Height** parameter adjusts the **displayed** number of lines. The **Height** parameter usually will **not** need to be adjusted, except for an unusual signal. **Height** has a range of from 1 to 1200. Adjustment above the automatic setting (i.e. 640x480) will try to display lines (i.e. 480 + (n)) that may not be available to be displayed. In most cases, you will display blank lines in the blanking or sync area of the signal.

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Horizontal – Total

The **Horizontal Total** parameter adjusts the total number of pixels in a line. **Horizontal Total** includes both the visible pixels and the retrace (or blanking) time.

Horizontal – Offset

Horizontal Offset has a range of from 1 to 1600 and has the affect of **positioning** the screen image horizontally within the RGB window. This control allows you to move the image back and forth sideways within the window.

Horizontal – Width

The **Width** parameter adjusts the **displayed** number of pixels. The **Width** parameter usually will **not** need to be adjusted, except for an unusual signal or image shape. **Width** has a range of from 1 to 1600. Adjustment above the automatic setting (i.e. 640x480) will try to display pixels (i.e. $640 + (n)$) that may not be available to be displayed. In most cases, you will display blank pixels in the blanking or sync area of the signal. The purpose of this adjustment is to fill the window with the graphics information.

Sync Type

Sync Type shows you what type of sync pulse is detected either automatically or when the **Detect Timing** button is used.

You will generally never need to set the sync type. Sync types are shown below:

- Separate - Horizontal on H pin, Vertical on V pin
- On Green - Sync on Green
- On H pin - Sync on Horizontal pin
- On V Pin - Sync on Vertical pin

Vertical Refresh

Vertical Refresh sets your scan rate. This setting has a range of from 0 to 120 Hz. You will usually not need to set this, as it is set from the input signal.

Polarity

The **Negative VSync Polarity** (vertical sync) check box sets the polarity of the vertical sync pulse to a negative value. This check box will be checked automatically if the software detects a negative sync pulse.

The **Negative HSync Polarity** (horizontal sync) check box sets the polarity of the horizontal sync pulse to a negative value. This check box will be checked automatically if the software detects a negative sync pulse.

Window Menu

Auto Detect

The **Auto Detect** check box allows you to enable or disable automatic detecting of the RGB timing signals from the source computer. With the **Auto Detect** feature **enabled**, the software will attempt to auto-detect the RGB source timing parameters for a selected RGB window when switching among external signal sources or if the current incoming signal should change or not be readable for a short period of time.

Disabling the **Auto Detect** feature will force the software to apply the currently selected timing to the window regardless of any changes in, or loss of, the source signal. **Disabling** the **Auto Detect** feature preserves user-set adjustments when losing or switching between external signal sources. You can always do a one-time click of the **Detect Timing** button to force a detection of the current incoming signal timing, but the system will not poll. Once the timing is set, it is not changed automatically, regardless what you do with the input signals.

Detect Timing

Clicking the **Detect Timing** button re-samples the input signal on the currently selected channel and set the timing parameters as best it can. In many cases, this is all that is needed to insure a properly adjusted image in your RGB window. You can always return to default values with this button if you decide **not** keep any adjustment changes you have made.

Save as Default

Save Default saves the current settings in the node.

Clear Default

Clear Default clears the settings saved in the node.

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All Parameters Properties

Select the **All Parameters** tab to display the dialog shown below.

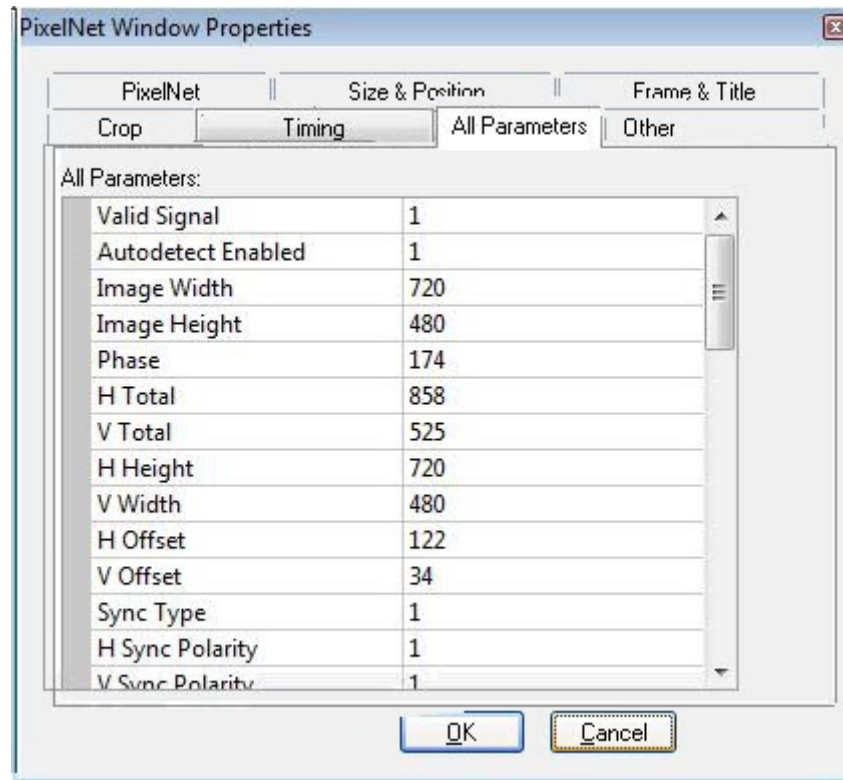


Figure 93 - PixelNet Window Properties – All Parameters

This properties page displays all of the parameters associated with the **PixelNet Input** window. To modify the values, select the desired parameter, change the value, and click **Apply**.

Window Menu

Table 10: PixelNet Parameters

Parameter Name	DVI Input	HD Input	Notes
SIGNALVALID	R	R	1 = Valid Input Signal
AUTO DETECT ENABLED	W	W	1 = Attempt to find signal timing when a signal change is detected.
ACTIVE INTERFACE	R	R	1 = Node Interface in use
IMAGE WIDTH	R	R	Pixels
IMAGE HEIGHT	R	R	Lines
PHASE	W	W	-180 - +180 Degrees
H TOTAL	W	R	Pixels
V TOTAL	R	R	Lines
H ACTIVE	W	R	Pixels
V ACTIVE	W	R	Lines
H OFFSET	W	R	Pixels
V OFFSET	W	R	Lines
SYNC TYPE	R	R	2 = Composite 1 = Separate 0 = Sync on green
H SYNC POLARITY	R	R	1 = Negative polarity
V SYNC POLARITY	R	R	1 = Negative polarity
H SYNC RATE	R	R	In CentiHz
V SYNC RATE	R	R	In CentiHz
OFFSET_M	W	W	-100 - +100 percent
OFFSET_R	W	W	-100 - +100 percent
OFFSET_G	W	W	-100 - +100 percent
OFFSET_B	W	W	-100 - +100 percent
GAIN_M	W	W	0 - +200 percent

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Table 10: PixelNet Parameters

GAIN_R	W	W	0 - +200 percent
GAIN_G	W	W	0 - +200 percent
GAIN_B	W	W	0 - +200 percent

Table Legend

W = Writable Parameters

R = Read-Only Parameters

5.3.7.15 PixelNet DVI KM (RemoteCursor)

PixelNet KM (RemoteCursor) allows you to control a DVI source attached to a PixelNet Input Node.

The following are the requirements for setting up the input DVI KM node:

- RemoteCursor requires the PixelNet DVI KM input node. SDI or HD input nodes do not have this functionality
- A USB cable (A to B) connection between the source and the PixelNet DVI KM node (the USB connection acts as the standard USB Keyboard-Mouse for the source system).

Note	The USB cable must not be more than five meters long. Jupiter Systems does not provide the USB cable.
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A standard PixelNet Configuration:

- 48-port PixelNet Switch (this is a special switch that cannot be used on a standard Ethernet Network)
- CatalystLink board installed in the Fusion Wall Controller
- At least two CAT 6 cables to connect the DVI KM input node to the switch and two CAT 6 cables to connect the switch to the CatalystLink board
- Standard Ethernet connection between a workstation running ControlPoint client and the Fusion Wall Controller
- An open USB port on the source computer

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- A display input connection between the source and the PixelNet DVI KM input node (as shown in the figure below):

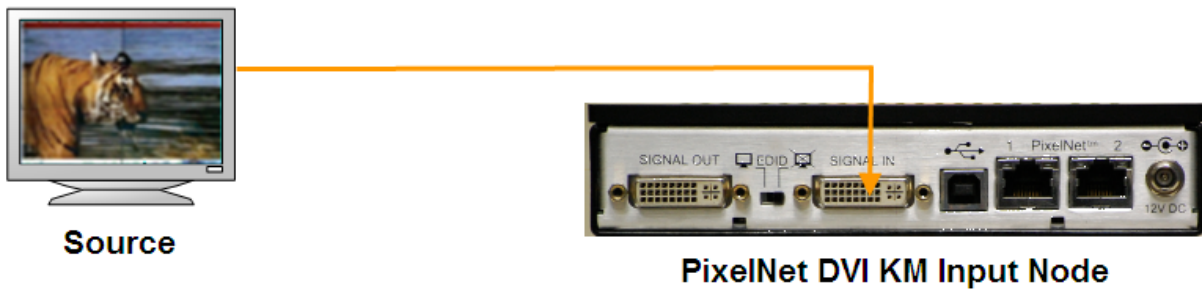


Figure 94 - Display Input Connection

5—

RemoteCursor Connectivity

Connections required for using the PixelNet DVI KM RemoteCursor:

- Connect two CAT 6 cables between the CatalystLink board and the PixelNet switch.
- Connect two CAT 6 cables between the PixelNet input node and the PixelNet switch.
- Connect a USB cable between the source computer and the PixelNet input node.
- Connect your source computer (VGA or Digital) to the SIGNAL IN connector on the PixelNet input node.
- Connect the Fusion Wall Controller to a standard Ethernet network.
- Install the ControlPoint software on a workstation. Refer to the Installation section of the User's Manual for detailed information.
- Connect the workstation to a standard Ethernet network.

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The following figure is an example of a PixelNet DVI KM connection

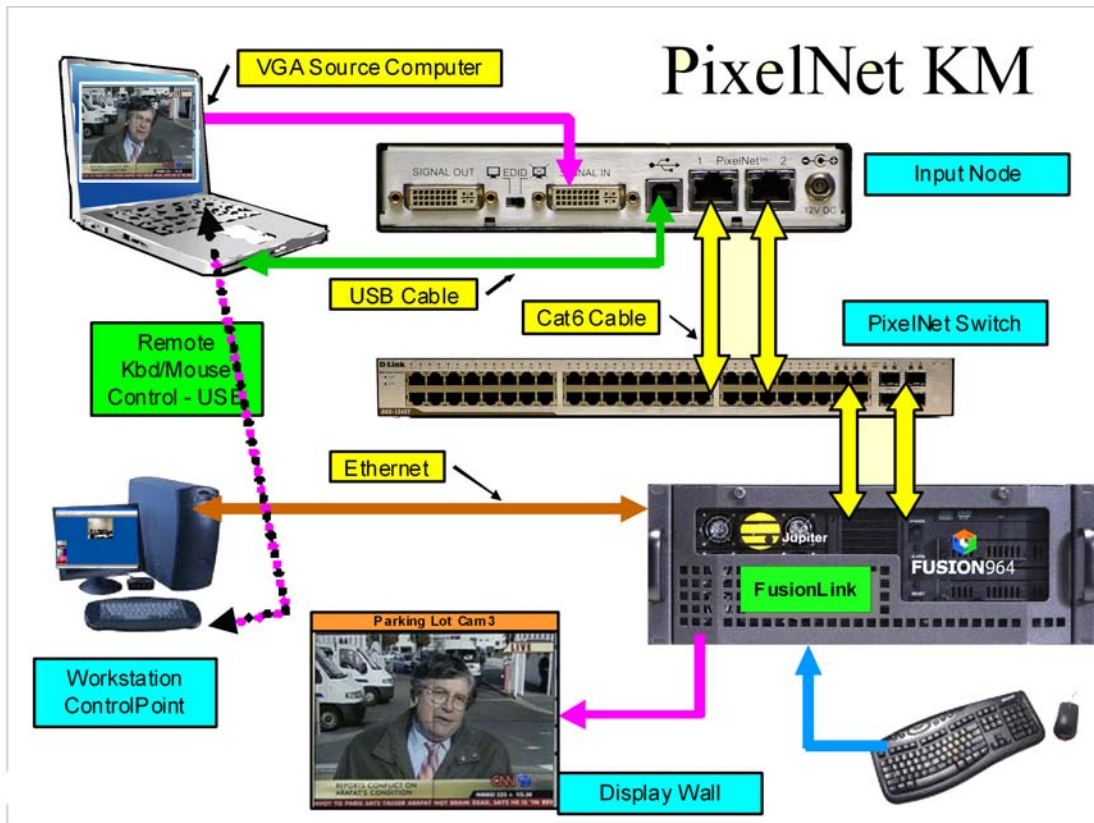


Figure 95 - PixelNet DVI KM (RemoteCursor) Connections

Using PixelNet DVI KM (RemoteCursor)

- Run the ControlPoint remote client on the workstation.
- Open the Object Browser.
- Open the PixelNet Input section or select the Input tab.
- Right-click on the node to check whether it is a DVI KM input node type and select it.
- Drag an input node entry or icon to the Main Wall as shown in [Figure 96](#).
- Right-click on the window icon and select PixelNet KM. The ControlPoint client cursor will disappear and the workstation Keyboard and Mouse will now be acting as Keyboard and Mouse for the input node source computer.

Window Menu

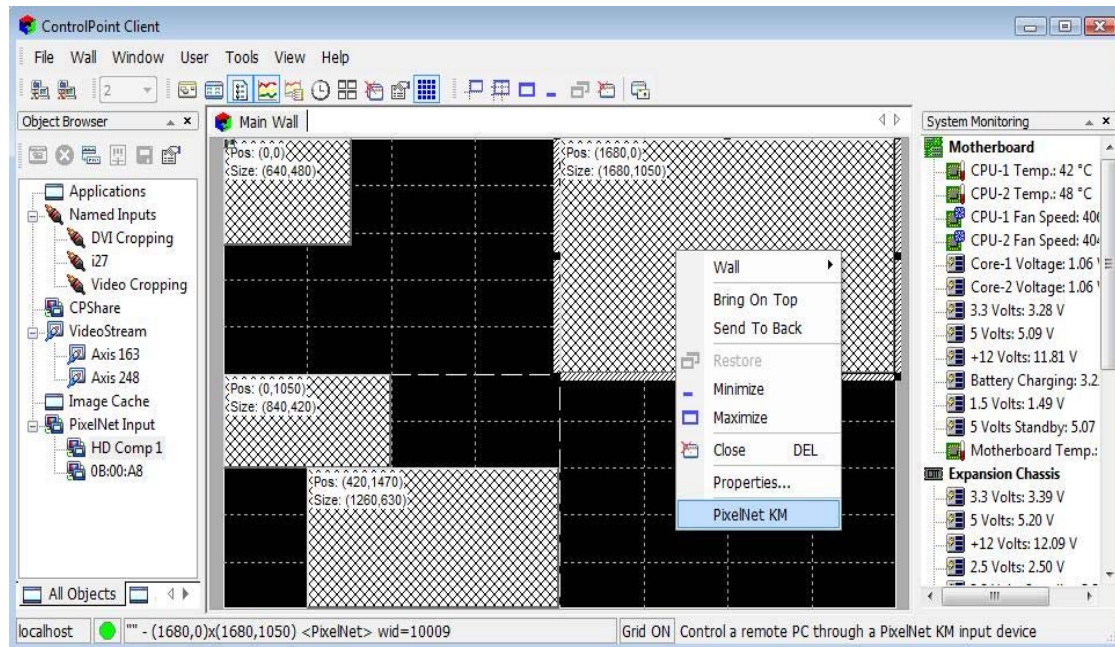


Figure 96 - PixelNet DVI KM (RemoteCursor)

When RemoteCursor has been activated, you will see the message box shown below. Click on the box or use Ctrl+Alt+C to release the RemoteCursor.

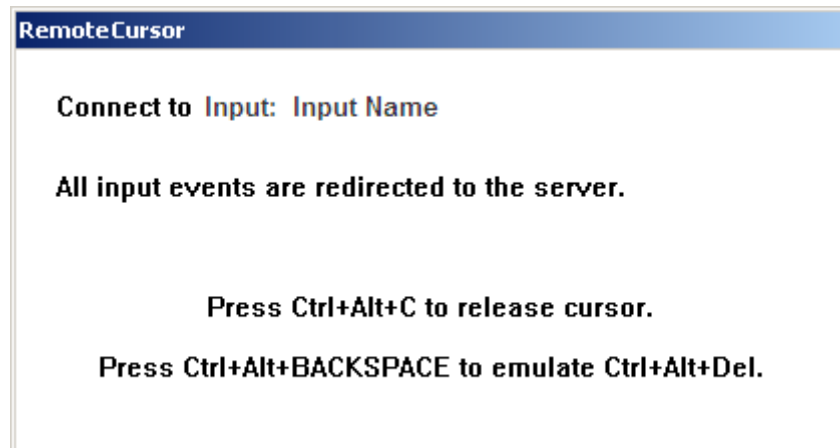


Figure 97 - RemoteCursor Activation (DVI KM)

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5.3.7.16 ControlPoint Control Host

The **ControlHost** command is only available for CPShare windows. The command allows the user to open a remote control session to the VNC server installed on the CPShare source computer. The command opens a new VNC client window on the workstation.

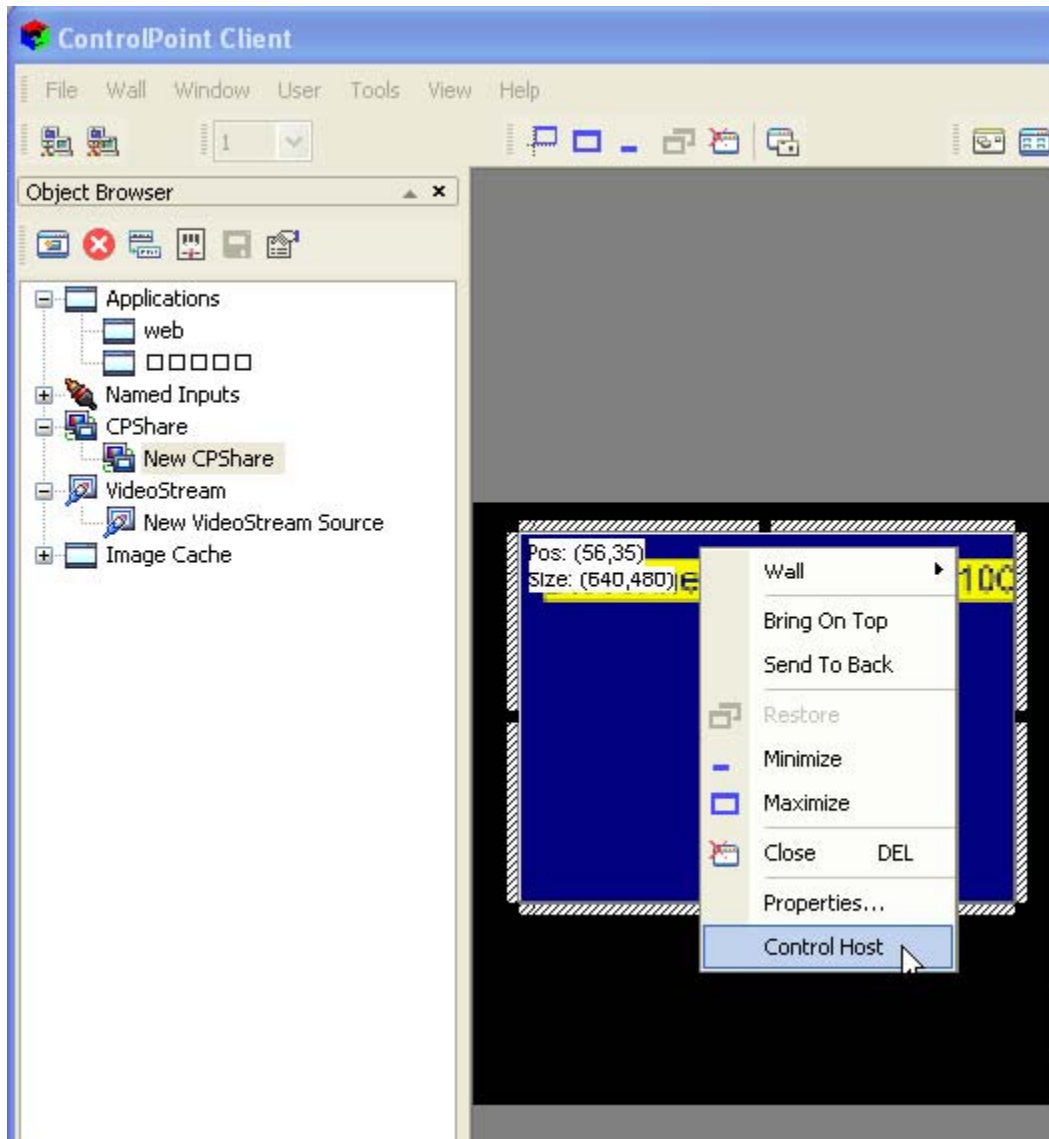


Figure 98 - Control Host within ControlPoint Client

Window Menu

Note	A VNC server must be installed on the host computer being displayed and controlled
-------------	--

5.3.7.17 DVI Capture Remote Cursor

DVI Remote Cursor allows you to control the source system for a DVI Capture window. The DVI Capture Remote Cursor feature requires that you install the Remote Cursor Server.

Installing DVI Capture Remote Cursor

The Remote Cursor Server software can be installed from the Remote Cursor Server CD. Follow the instructions in the Install Wizard.

Using DVI Capture Remote Cursor

In order to use the DVI Remote Cursor, you need to have direct visual contact with the DVI window. The source for this DVI window is the computer controlled by the Remote Cursor.

There are two ways to use DVI Remote Cursor:

- Working on the Fusion Wall Controller using the directly connected keyboard and mouse (refer to [Figure 99](#)).
- Controlling the wall using ControlPoint client on a workstation (refer to [Figure 100](#)).

You can use Remote Cursor on any DVI source that has the server installed.

1. Select the DVI Window.
2. Open the context menu (by right-clicking).
3. Select **Remote Cursor**. Refer to [Figure 100](#). (If the **Remote Cursor** menu item is disabled, enable it before proceeding.)

The ControlPoint client cursor will disappear and the workstation Keyboard and Mouse will now be acting as Keyboard and Mouse for the DVI source computer (which means the DVI Window on the wall reflects the active cursor).

5—Client Menu and Tool Bar

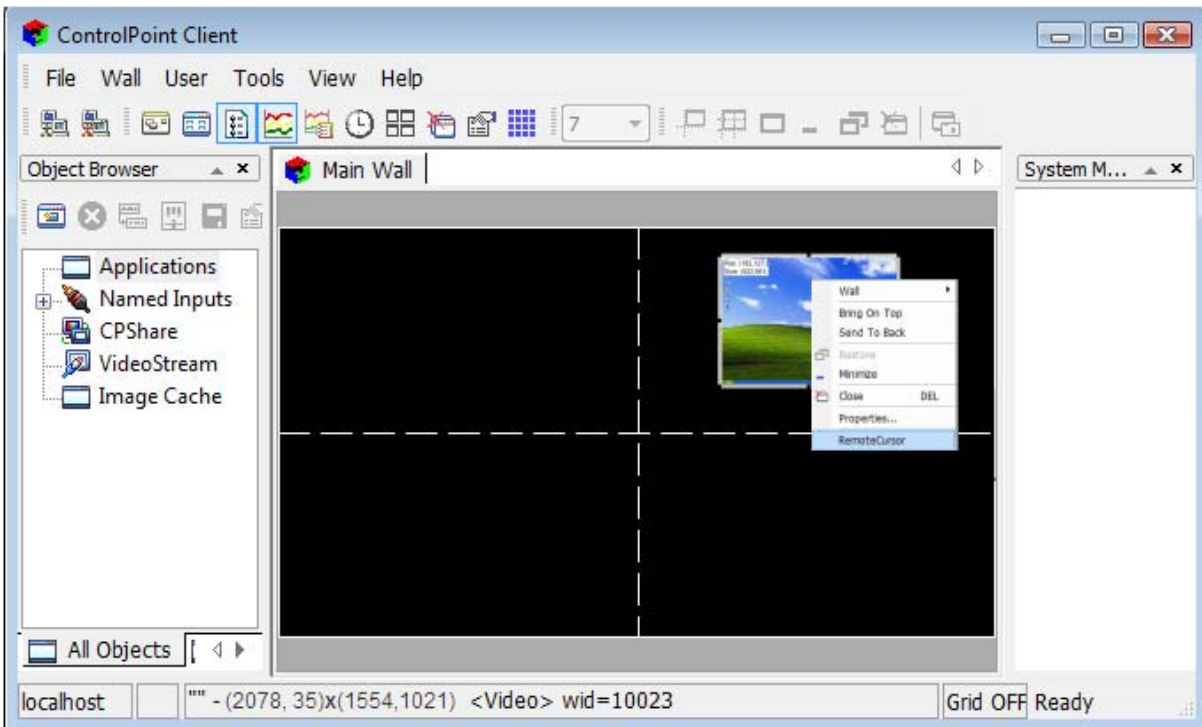


Figure 99 - DVI Capture Context Window—DVI Remote Cursor

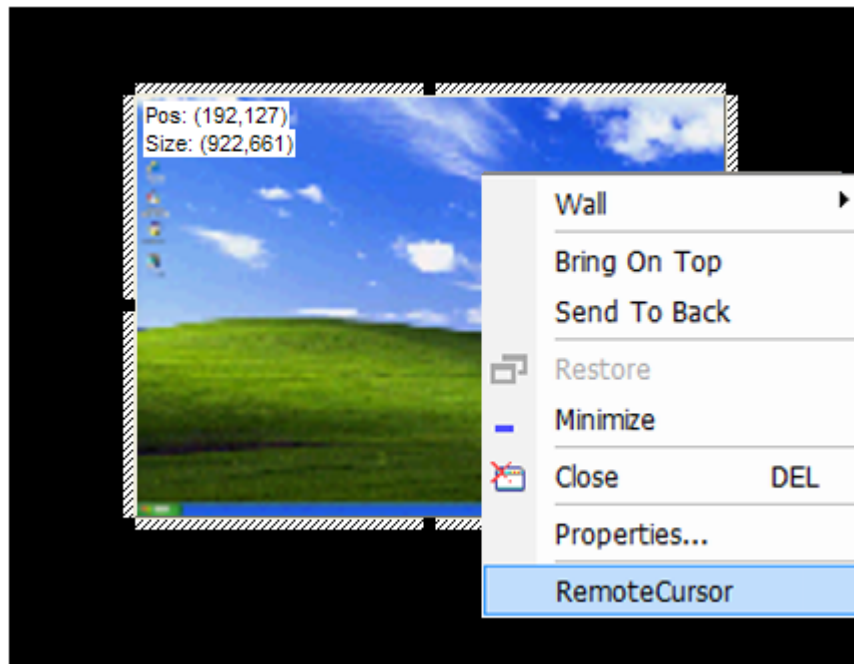


Figure 100 - DVI Remote Cursor (using CP from workstation)

Window Menu

When Remote Cursor has been activated, you will see the message box shown below.

Click on the box or use Ctrl+Alt+C to release the Remote Cursor.

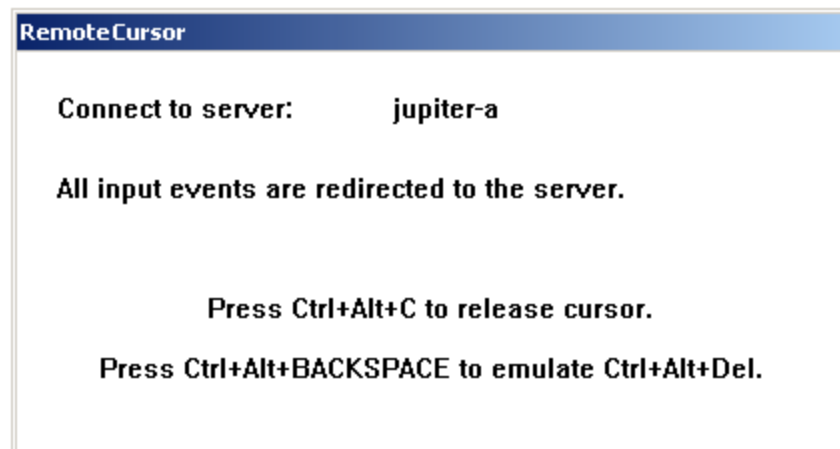


Figure 101 - Remote Cursor Activation (DVI)

Enabling Remote Cursor

If your connection to the Remote Cursor was disabled for some reason, you can enable the connection by performing the following:

1. With the DVI Capture selected, click **Properties** from the Window menu.
2. Select the **DVI Remote Cursor** tab. The following screen will appear.

5—Client Menu and Tool Bar

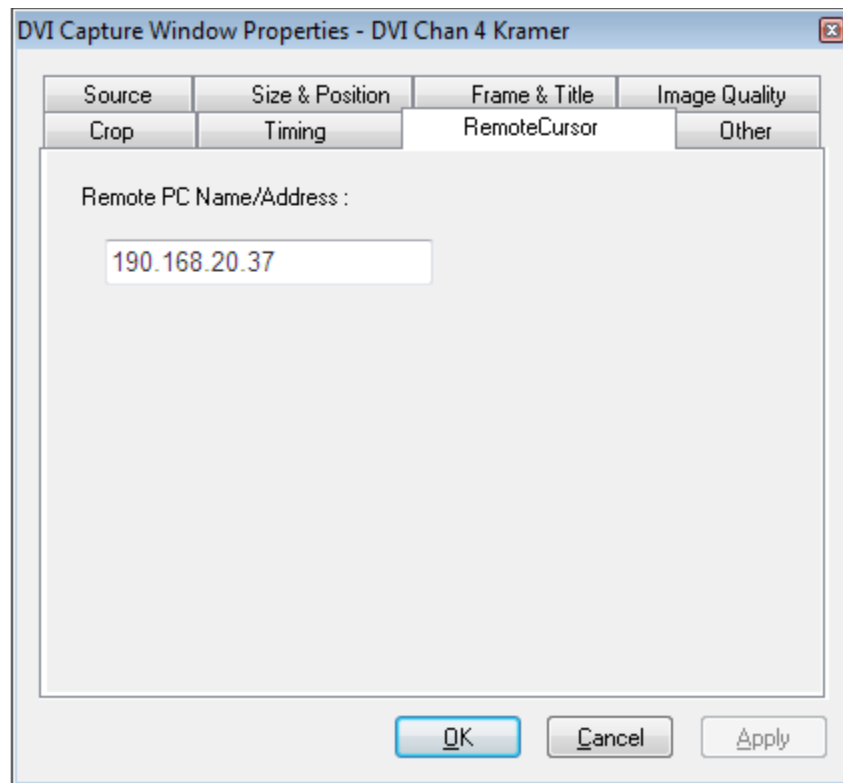


Figure 102 - Enabling Remote Cursor

3. Enter the name or the IP address of the remote system being controlled.
4. Click **Apply**. The Remote Cursor has been enabled.

If you return to the DVI Capture and use the context menu, you will see the Remote Cursor menu item active (refer to [Figure 99](#)) and not grayed out/disabled like before.

User Menu

5.4 User Menu

The **User** menu allows you to select **Change Password** or **Manage Users**.

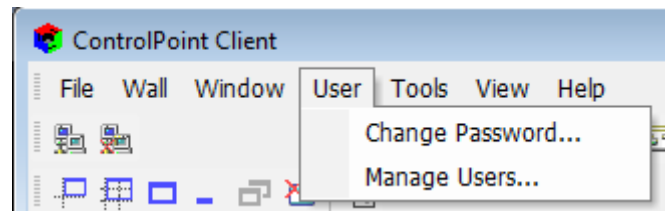


Figure 103 - User Menu

5.4.1 Change Password

The **Change Password** menu item gives you the **Change User Password** dialog shown below. Enter your old password to change to a new one. Enter the new password and then enter it again to confirm it. Click **OK** to accept the changes.

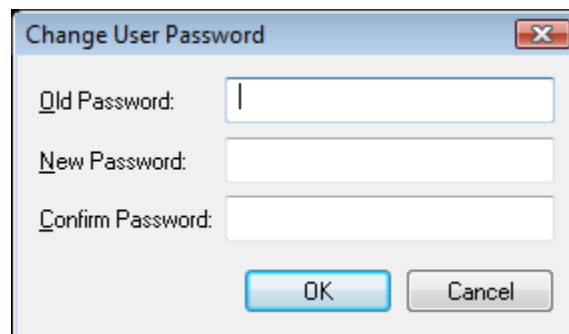


Figure 104 - Change Password Dialog

5—Client Menu and Tool Bar

5.4.2 Manage Users

The **Manage Users** menu item brings up the **User Manager** dialog shown below.

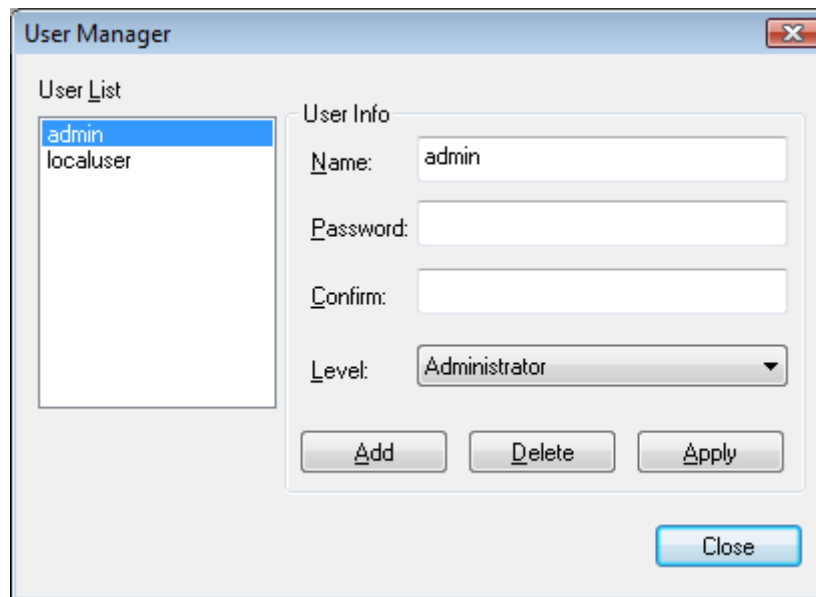


Figure 105 - Manage User's Dialog

This dialog allows you to add users who will be able to log into ControlPoint and control DVI and Video windows on the Display Wall. You may **Add**, and **Delete** users, set or change passwords and set the user **Level**.

The **User Level** drop down list is shown in [Figure 106](#).

User Menu

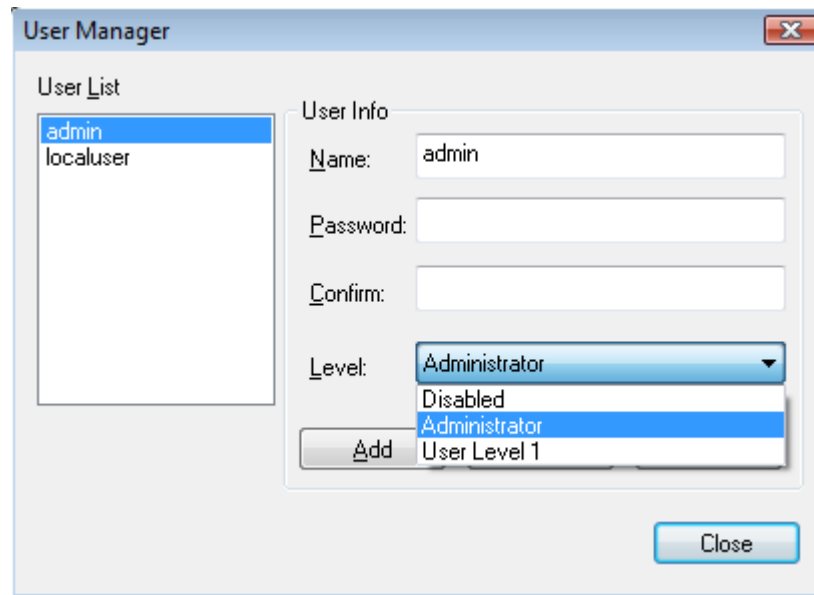


Figure 106 - User Levels

You may give a user one of three user levels:

- Administrator
- User Level 1
- Disabled

Administrator allows the user to do everything including manage users. **User Level 1** allows the user to do everything except manage users. The **Level** drop-down list also allows you to disable the user by selecting **Disabled** from the list. A **Disabled** user will not be able to connect to the server.

5—Client Menu and Tool Bar

5.5 View Menu

The **View** menu options open secondary windows. The secondary window options are described in the following sections.

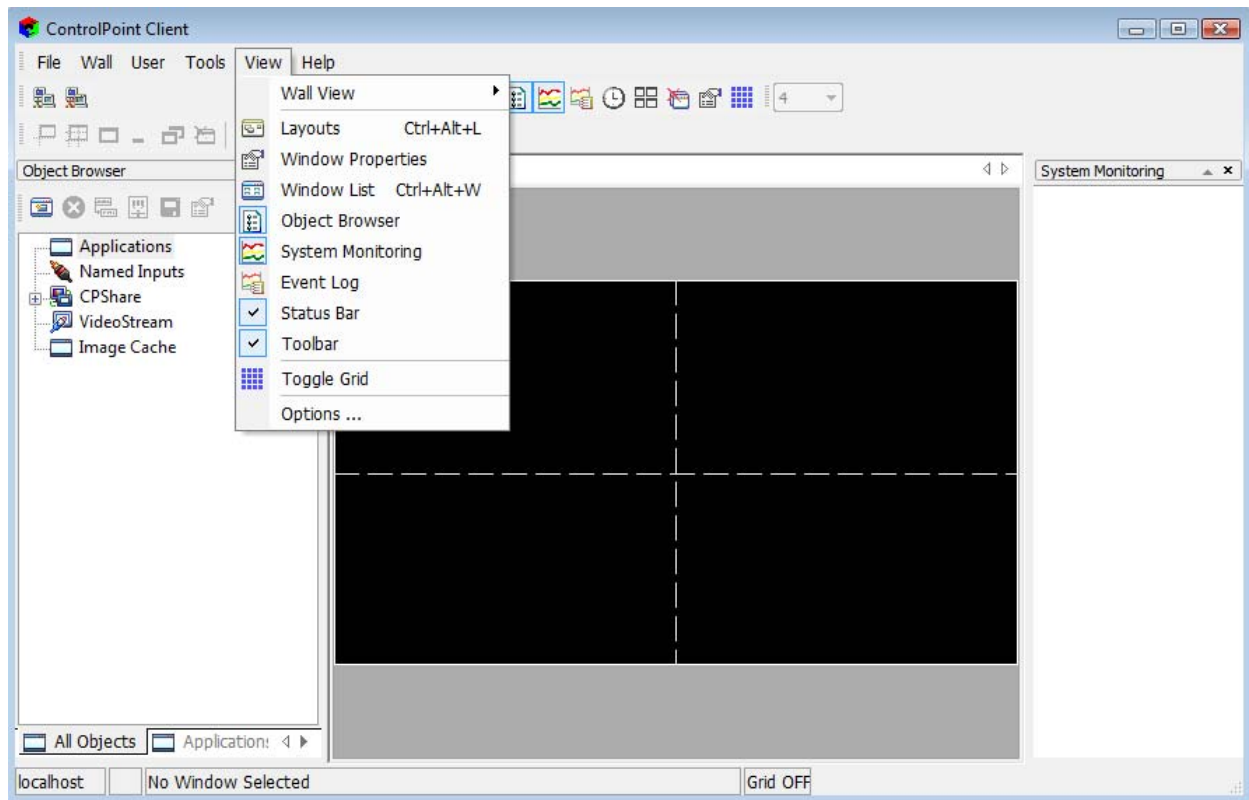


Figure 107 - View Menu

View Menu

5.5.1 Wall View

The **Wall View** menu items allow you to select how the ControlPoint wall mimic is displayed. These options are described in the following:

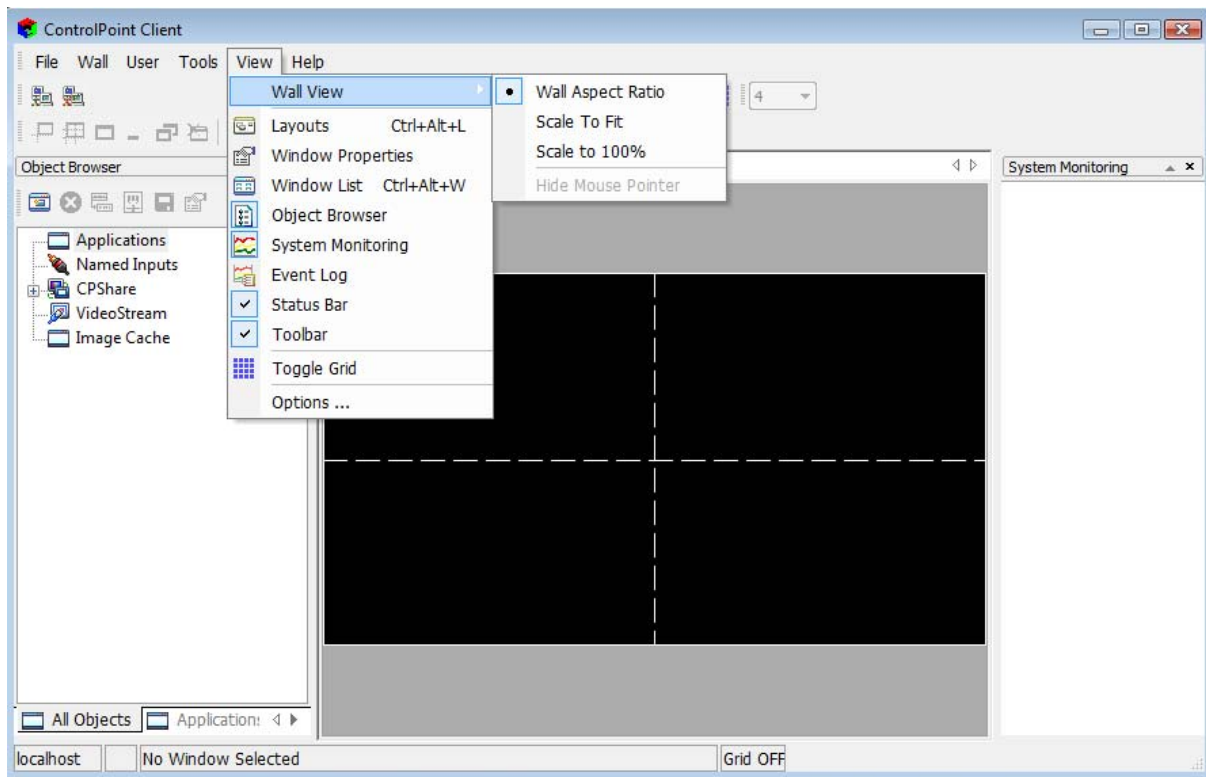


Figure 108 - Wall View Menu

5.5.1.1 Wall Aspect Ratio

The **Wall Aspect Ratio** menu item sets the scaled window image to **(mimic)** the same height/width ratio as that of your Display Wall. This is the default setting. Window icons within the ControlPoint window will scale appropriately to the size of the scaled window image. As shown above, the wall image is scaled within the ControlPoint window.

5—Client Menu and Tool Bar

5.5.1.2 Scale to Fit

The **Scale to Fit** menu item sets the Wall mimic to fill the available ControlPoint window space. All window icons will scale proportionately within the new window shape.

5.5.1.3 Scale to 100%

The **Scale to 100%** menu item expands your scaled window image to the size of your Display Wall. This function expands the desktop image within the ControlPoint window to 100% of the actual wall-display area. If you have a 4x3 display wall at 1024x768, this whole area (4096x2304) will be represented in the window and you will have to scroll around that desktop within the ControlPoint window. Window icons will be shown as full size.

5.5.1.4 Hide Mouse Pointer

The **Hide Mouse Pointer** menu item, when selected, toggles the Show/Hide setting and hides the mouse pointer on the server system.

5.5.2 Layouts

This section describes the different functions of the Layout dialog box.

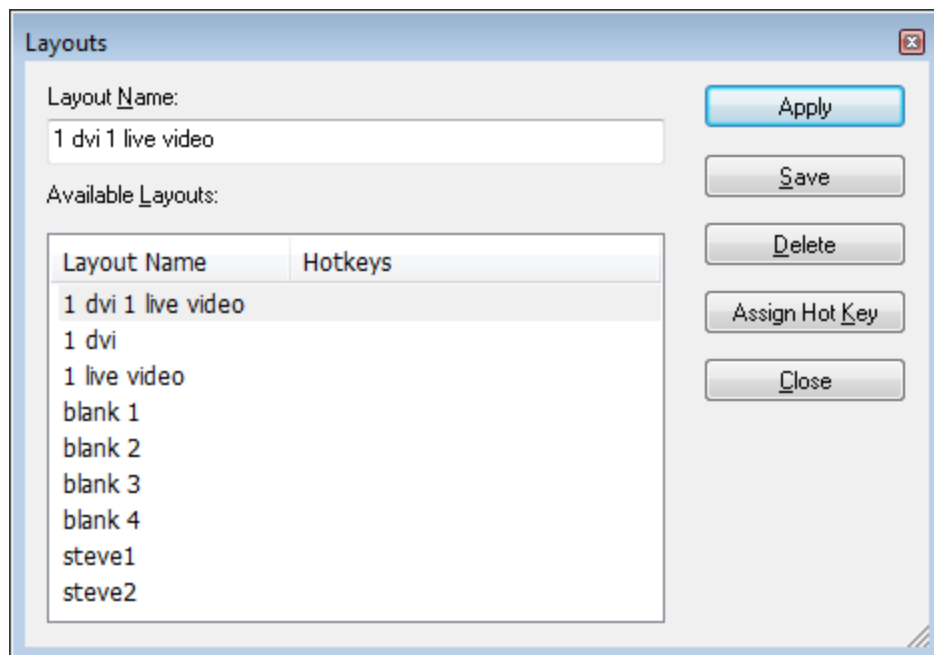


Figure 109 - Layout Dialog

View Menu

A **Layout** consists of a file with **all** settings (e.g. properties) for **all existing** windows that have been created on the Display Wall. Saving a layout will save all windows, with their positions, sizes, proper channels, and all other settings that were made to those windows' parameters.

A series of windows must first be created on the Display Wall by opening windows, sizing, and placing them where desired, with setting any parameters for these windows. Then, the layout must be saved using a name of your choice. It is recommended that the layout name reflect its use or function (i.e. Day-Shift or Night-Shift, NOC-left, NOC-Right, PowerPoint Presentation, Console1, Console2).

5.5.2.1 Delete Layout

The **Delete Layout** button will delete the selected layout.

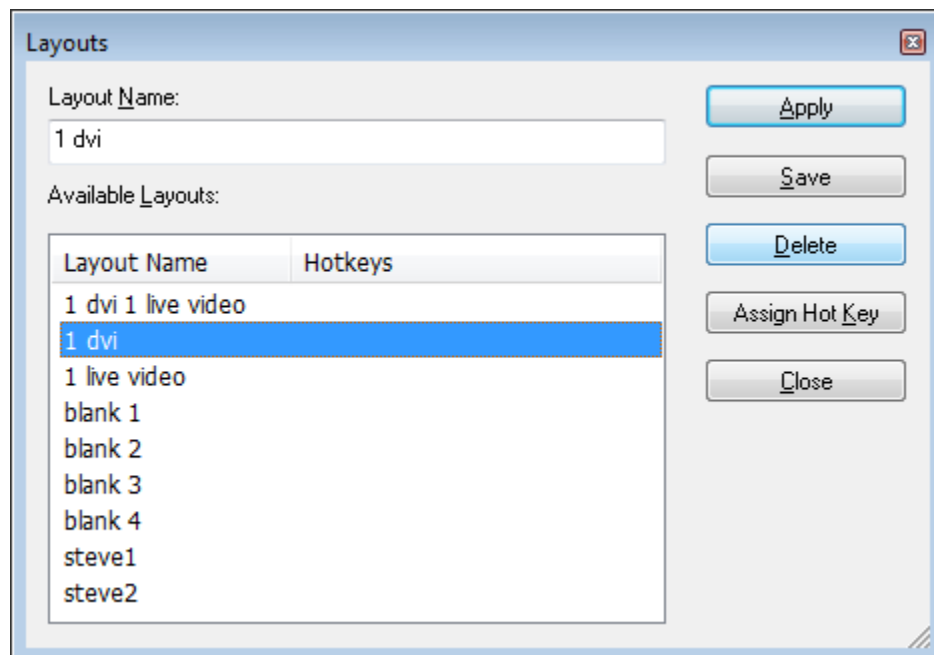


Figure 110 - Delete Layout Dialog

5—Client Menu and Tool Bar

When you try to delete a layout, after you click **Delete** you will get a confirmation dialog (shown below).

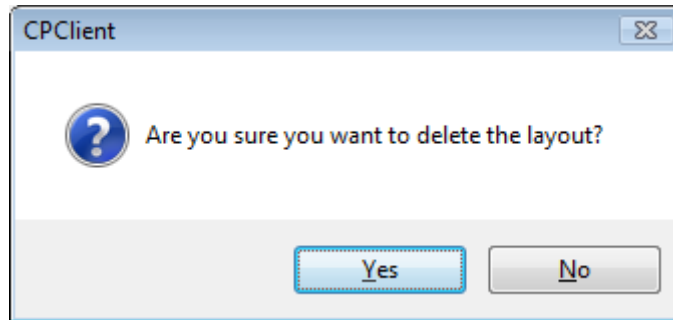


Figure 111 - Delete Layout Confirmation

5.5.2.2 Save Layout

The **Save Layout** button allows you to save the current layout. Either select a layout name to write over (overwrite) or enter a new layout name in the **Name** box. When saved, the new name will be added to the **Available Layouts** list for deleting, updating, or opening. You will get a confirmation dialog if you try to overwrite an existing Layout file (shown below).

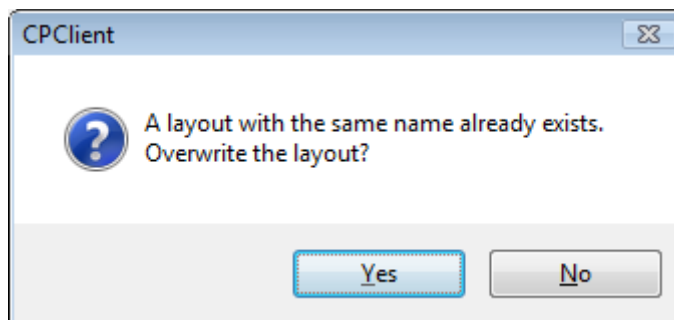


Figure 112 - Overwrite Confirmation

View Menu

5.5.2.3 Assign Hot Key

Select a layout from the **Available Layouts** list and click the **Assign Hot Key...** button to bring up the **Assign Hot Key** dialog.

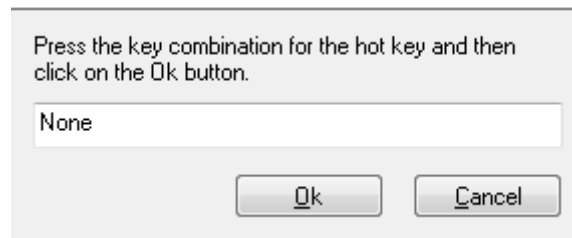


Figure 113 - Assign Hot Key Dialog

Figure 113 shows the default dialog for assigning a hot key to an existing layout. Notice that the input box says None. If you click **OK** now you will clear any existing **Hot Keys** assigned to the selected layout.

1. To assign a **Hot Key**, press the keys that you want to use to activate the selected layout and they will appear in the input box as you type them. This is shown in **Figure 114**.

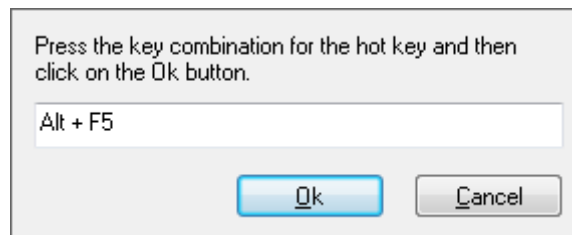


Figure 114 - Hot Key Assigned

2. Click **OK** to lock in the assigned **Hot Key**.

5—Client Menu and Tool Bar

- The following figure shows the Layout List with the illustrated layout showing the assigned hot key.

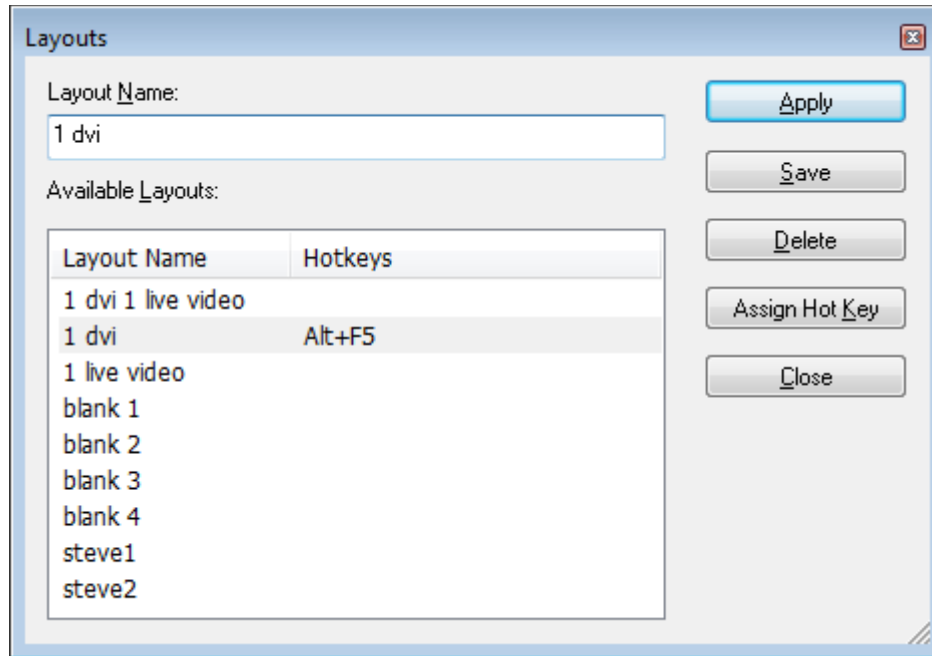


Figure 115 - Hot Key Showing in Layout List

Using Hot Keys

Use of **Hot Keys** is a simple process. Once the layout has been saved, it is added to the **Hot Keys** file. Anyone at any workstation can now use the assigned Hot Key to load and apply the respective layout.

Refer to the **Hot Keys** features and implementation sections that follow.

Delete **Hot Keys** by selecting **None**, then clicking **OK**.

Caution Care should be taken to create Hot Keys by using an option key or option key combination (Alt, Ctrl, Shift) when assigning Hot Keys, e.g., Alt+key. This means do NOT set a Hot Key to a single key (1-0 or a-z). You will not be able to use these keys for normal text entry. To avoid collision with other keys, it is suggested that you use the Function keys (F1-F12) along with option keys to create your Hot Keys (e.g., Alt+F3 or Shift+Alt+F7).

View Menu

Hot Key Features

- Users can assign **Hot Keys** to layout names from the **Layouts** dialog-box in both the **Client** and **Local Controls**.
- **Hot Keys** are system-wide for **Local Controls** (this means, the **Local Controls** will always react to **Hot Keys** presses regardless of the currently active application).
- **Hot Keys** are saved on the server. This means that you can use the same Hot Key from any active ControlPoint Client to activate a specific layout.

5.5.2.4 Close Layout

Click the **Close** button to close the Layout dialog.

5—Client Menu and Tool Bar

5.5.2.5 Apply Layout

The **Available Layouts** section allows you to select and load a previously saved layout (refer to [“Save Layout ” on page 132](#)).

Select a layout from the **Available Layouts** list and click the **Apply** button to apply that layout. All existing windows and property boxes will be closed before the new layout is opened. You can also apply a layout by double clicking the layout entry in the **Available Layouts** list.

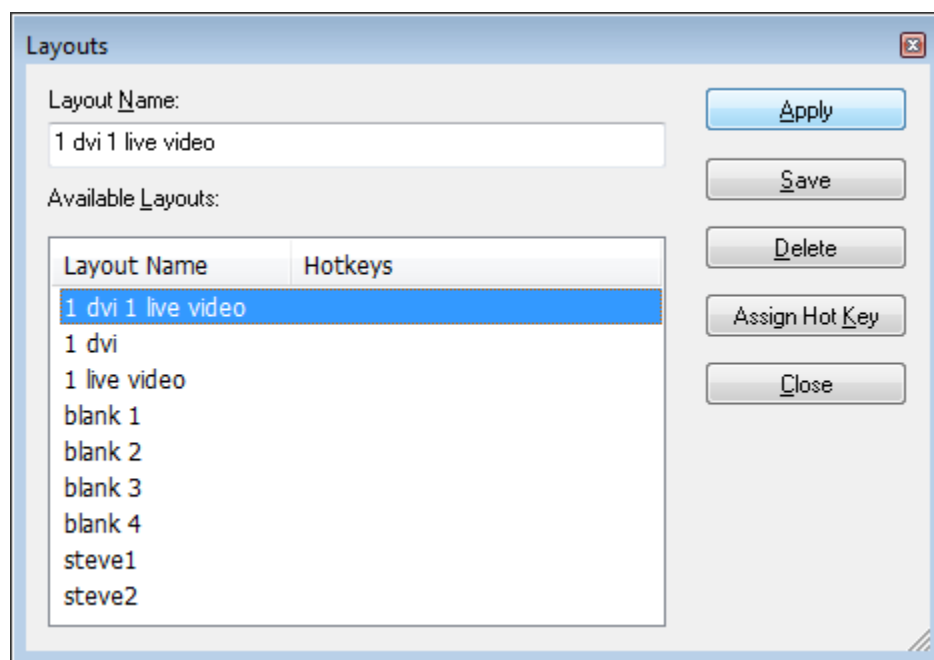


Figure 116 - Apply Layout

5.5.3 Window Properties

Selecting **Window Properties** opens the properties for the selected window.

5.5.4 Window List

The **Window List** is displayed in two different formats depending on whether you open it from the Local Controls or the remote client.

View Menu

5.5.4.1 Local Controls Window List

The Local Controls Window List shows only ControlPoint windows.

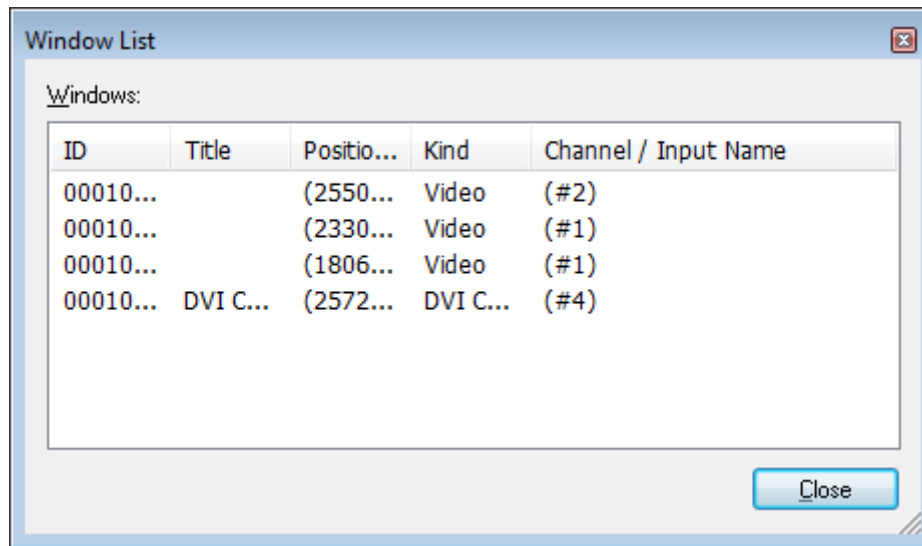


Figure 117 - Local Controls Window List

Right-click on a window in the **Window List** to bring up the **Window Menu**. This is the same menu as shown in the **Window** menu item or by right-clicking on the window icon in the ControlPoint window.

5.5.4.2 Client Window List

The Client **Window List** menu item brings up the dialog shown in [Figure 118](#). Note that the two of the entries are (Windows) System windows.

5—Client Menu and Tool Bar

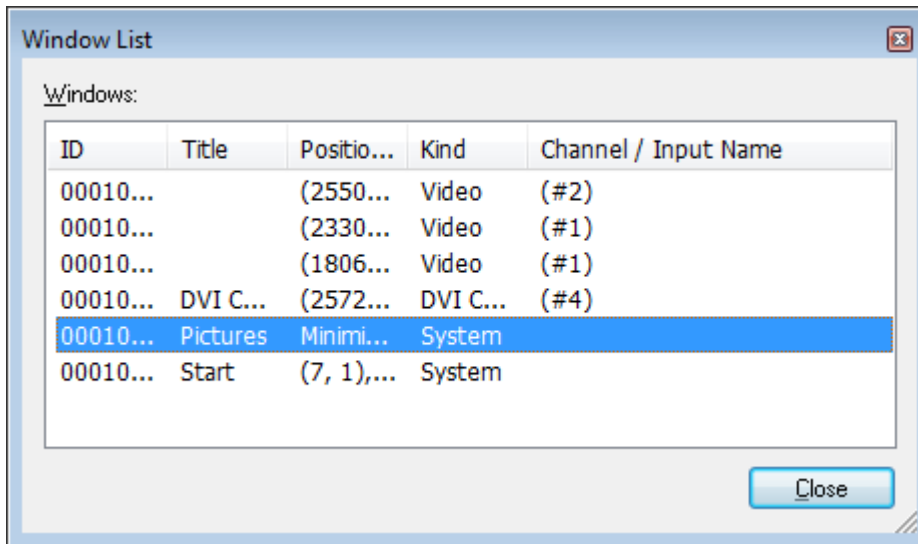


Figure 118 - Remote Window List

Note The ControlPoint Client Window List shows all windows on the display wall while the Local Controls Window list shows only the ControlPoint windows (i.e. DVI and Video windows). Selecting properties shows only appropriate properties for that window, i.e. a system window will allow only placement settings. Once a properties dialog is open you only need to select a different window – all windows' properties are viewable through a single dialog.

5.5.4.3 .Window List Right-Click Menu

Select a window and right-click it to bring up the menu shown in [Figure 119](#). You can keep track of and control all windows from one dialog if you wish. You can also bring up individual window properties.

View Menu

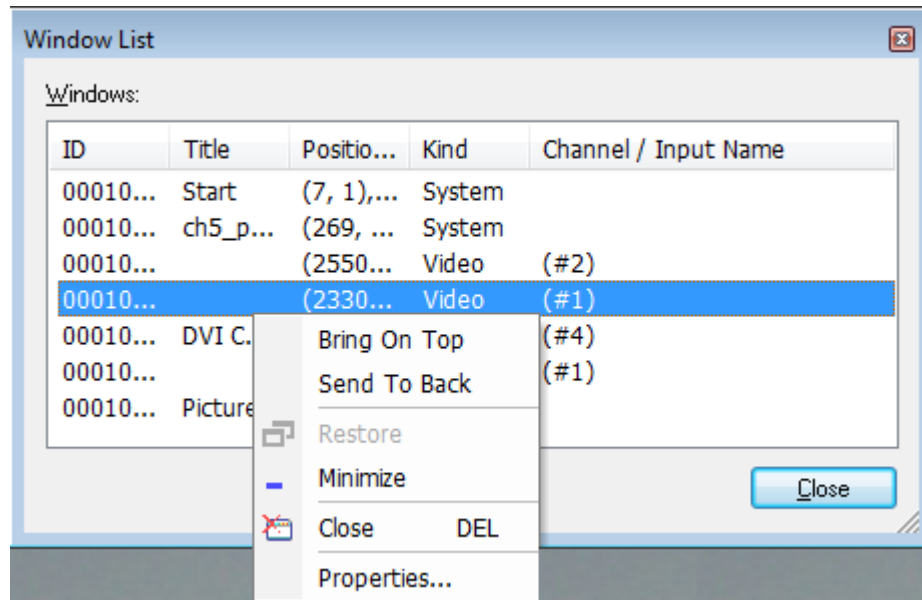


Figure 119 - Window List Right Click Menu

You **must** use the **Window List** to return to **Visible**, a window that has been made not **Visible** (Hidden). Click the **Visible** menu item to make a not-visible window visible.

5—Client Menu and Tool Bar

5.5.5 Object Browser

The Object Browser allows you to create many object types.

- Application Windows
- Named Input
- CPShare
- IPStream
- VideoStream

Users can Browse, Create New, Edit, Delete, and Invoke objects.

5.5.5.1 All Objects

The following figure shows the **Object Browser** with the **All Objects** tab open.

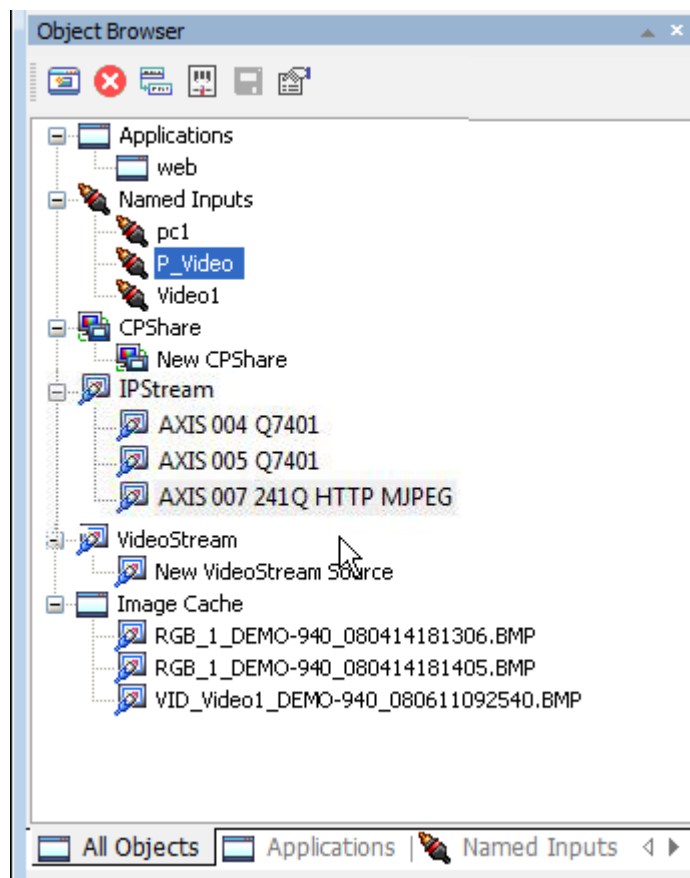


Figure 120 - Object Browser

View Menu

An example of an Object context menu is shown below:

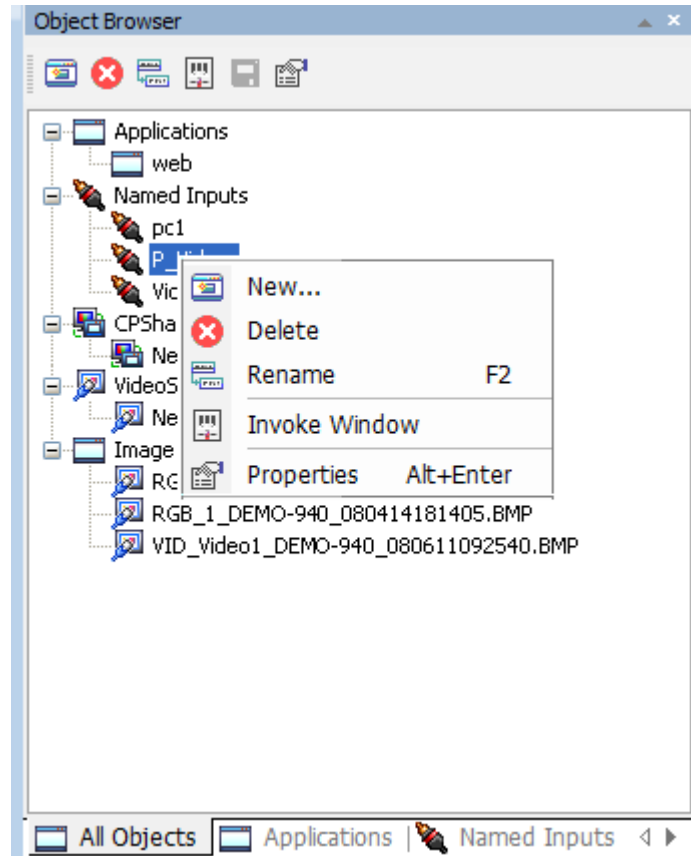


Figure 121 - All Objects Context Menu

To create a new Object, use the following procedure:

1. Select the type of Object by clicking on the appropriate tab or list title.
2. Click the **New Object** button or right-click in the open space. At this time, the properties for the chosen Object opens.
3. Edit properties as necessary.
4. Click **OK** to save the Object.

The Object right-click menus are context sensitive. Users can invoke an object by double-clicking on the icon, dragging-and-dropping the icon on the wall-mimic, or by right-clicking and invoking the object. All context menu items can also be performed from the tool bar at the top of the **Object Browser** window.

5—Client Menu and Tool Bar

5.5.5.2 Application Objects Overview

- Require prior setup and running of the application.
- Allow you to open and close applications with layouts.
- Allow you to drag and drop objects on the desktop to open applications from the Object Browser.
- Can be invoked manually from the Object Browser
- Allow you to keep applications alive between layout changes.
- ControlPoint owns applications registered as objects.
 - Will close with **Close All Windows** and with layout change.
 - Must be run as object, not 'ad-hoc' to be owned.
- Applications run by Scheduler must be registered as objects.
- Can be used as a short cut to run a program – easier than menu item

Creating an Application Object registers it in ControlPoint. ControlPoint owns applications registered as objects. Application windows will close with the **Close All Windows** menu item and with layout changes. When running application from the scheduler, they must be run as objects, not ad-hoc, to be owned by ControlPoint.

Creating Application Objects

1. Run the desired application on the Wall Controller
2. Run the **CPClient** either locally or remotely on a workstation.
3. Open the **Object Browser** and select the **Application** tab.
4. Select the application's icon in the Wall Mimic - **NOT** the application window itself.
5. Click the **New Object** button or right-click within **Applications** and select **New**.
6. The properties dialog for the new object opens. The Name, Window Descriptor, Application Target, and Work Directory are derived from the Application information within Windows.
7. Click **OK** to close the properties and save the object.

View Menu

Using the Application Object

You can invoke Application Objects interactively or save them as Application windows in a layout.

ControlPoint recognizes windows by their window descriptor. The window descriptor specifies the window title, the window class, and the process name. The window descriptor is a signature that uniquely identifies an open window on the Windows Desktop.

The Window Descriptor contains information about how the window is created. ControlPoint will automatically include application windows when the user saves them in layouts.

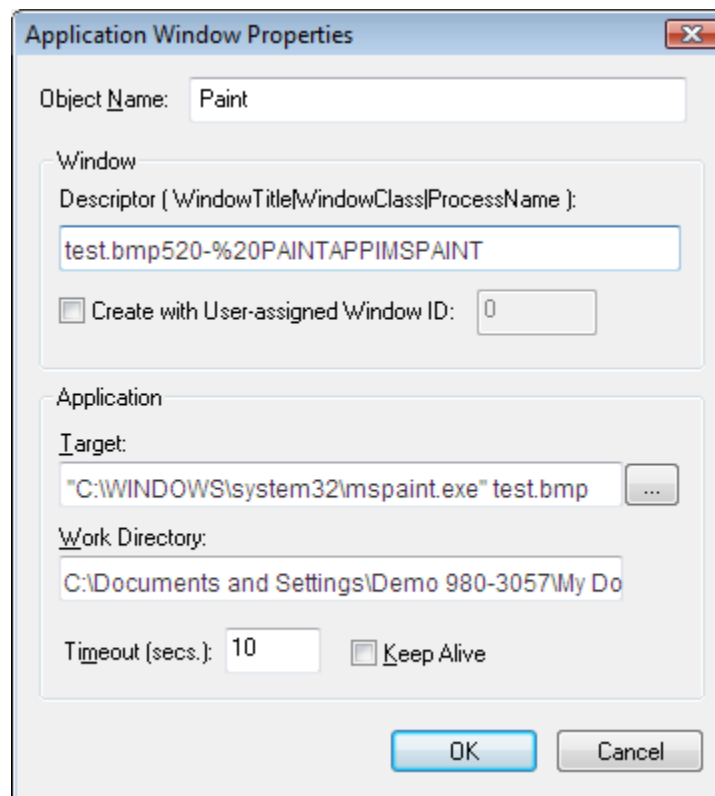


Figure 122 - Application Window Properties

5—Client Menu and Tool Bar

The following is an example of Application Properties:

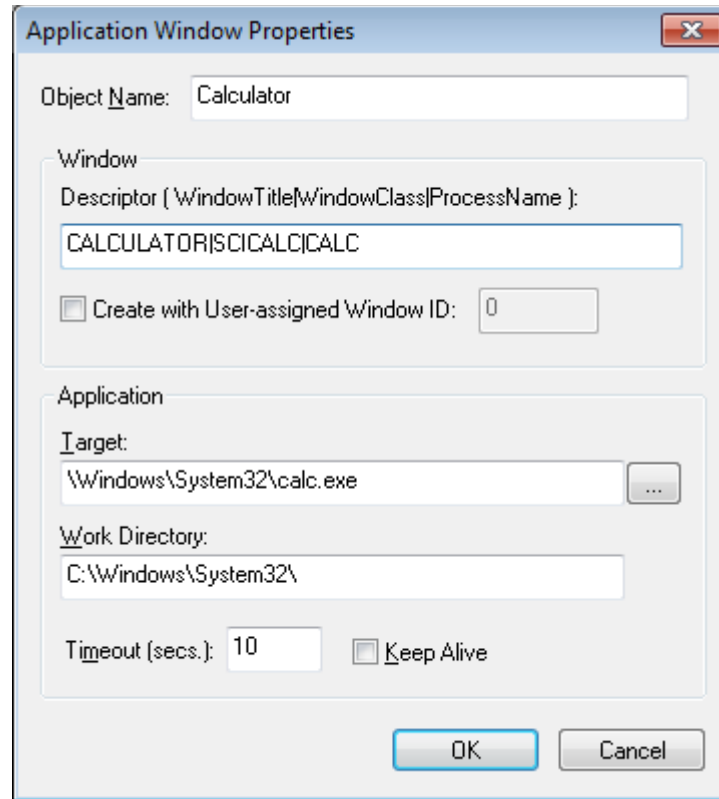


Figure 123 - Application Window Properties

Object Name specifies the name of the Application Window object. This must be a unique name. References to this object are made by this name. The object name must be a valid Windows file name and cannot contain the '*?|<>\\' characters.

Descriptor specifies a unique signature from Windows that identifies the window within ControlPoint. ControlPoint uses this information to find an open window on the desktop. The window descriptor consists of three fields: **window title**, **window class**, and the **process name**. These fields are separated with the pipe character ('|'). Wild-cards can be used in any of the descriptor fields.

When ControlPoint creates an application window, it assigns a server-generated window ID. If you want to set a user-assigned window ID, select the **Create with User-assigned Window ID** check-box and type in the window ID number in the adjacent box. As in **all User Assigned Window ID's** this must be a unique number greater than 1 and less than 10,000.

View Menu

Target specifies the path to start the application and the parameters to be using when executable failed. If not passed fully from Windows, these parameters need to be manually entered. Refer to the Command Line Editing of the application.

Work Directory specifies the path to the folder where the application data is stored.

Timeout specifies the maximum amount of time the ControlPoint server will take to find a window descriptor after the application has started.

You will receive the following error message when the server cannot identify the window as defined by the **Window Descriptor** within the specified **Timeout** time.

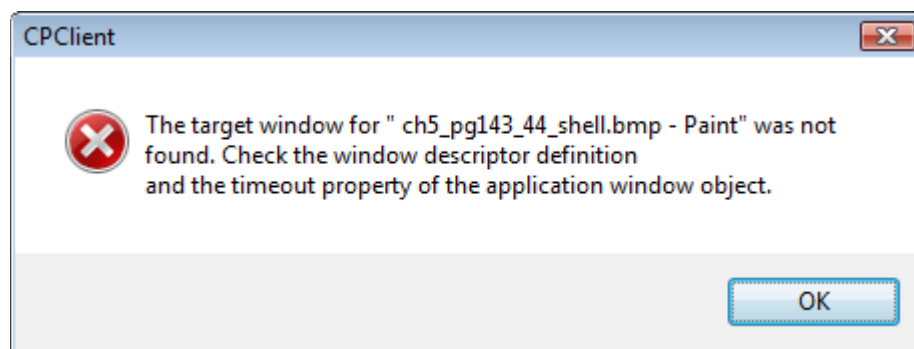


Figure 124 - Window Unidentified Error

Check the window descriptor or increase the timeout to avoid this error.

Keep Alive instructs ControlPoint not to close the **application** window when the layout is changed. All applications will close by default when layouts change. Applications that need to stay open and preserve data should be marked as **Keep Alive**.

5.5.5.3 Named Inputs

Named Inputs provide the ability to predefine a set of window properties specific given source. Hence the name Named Inputs – the name of the input source (i.e. Parking Lot Camera, Front Door, Joe’s Computer, Server 27). Named Inputs can be applied only to Video and DVI Windows.

A Named Input is a predefined template with input capture parameters, as well as additional actions needed to display that input in a window

5—Client Menu and Tool Bar

The Named Input contains information used to define the window (either Video or DVI Capture). This information includes the input channel, the video format, video source, RGB Timing parameters, and all properties associated with a window, dependent upon the type of window. The Named Input may contain a list of applications or utilities that may control external hardware affecting the input to the selected window.

A window is defined by its properties. A Named Input is a set of specifically adjusted properties. When the Named Input is called, those properties now replace the properties previously defining the window. The window is now defined by the properties in the Named Input.

Creating a Named Input

Use the procedure listed below to create a Named Input.

Named Input Procedure (DVI input example)

1. Open a DVI window and fill with desired source.
2. Open Window Properties:
 - Make adjustments as necessary for this window's source:
 - Place window and size it as needed
 - might be RGB Timing for a specifically difficult source
 - might be special cropping for a series of same systems
 - could be just the object to be called from external control
 - could be for control of an external switch
 - any and all window properties
3. Open ControlPoint Client (either locally or remotely) if not already open
 - Open the Object Browser
 - Select **Named Inputs**
4. Select the created/adjusted window mimic icon in the ControlPoint Client GUI
5. Right click in the Object Browser Input window
 - Select **New** – you will see properties similar to your Window Properties
 - Take care to not get these properties confused with Window Properties
6. It will automatically save in
C:\ProgramData\ControlPoint\ServerDataFiles\inputs
when you close the INPUT property windows.

View Menu

The figure below is a typical display of Named Input properties.

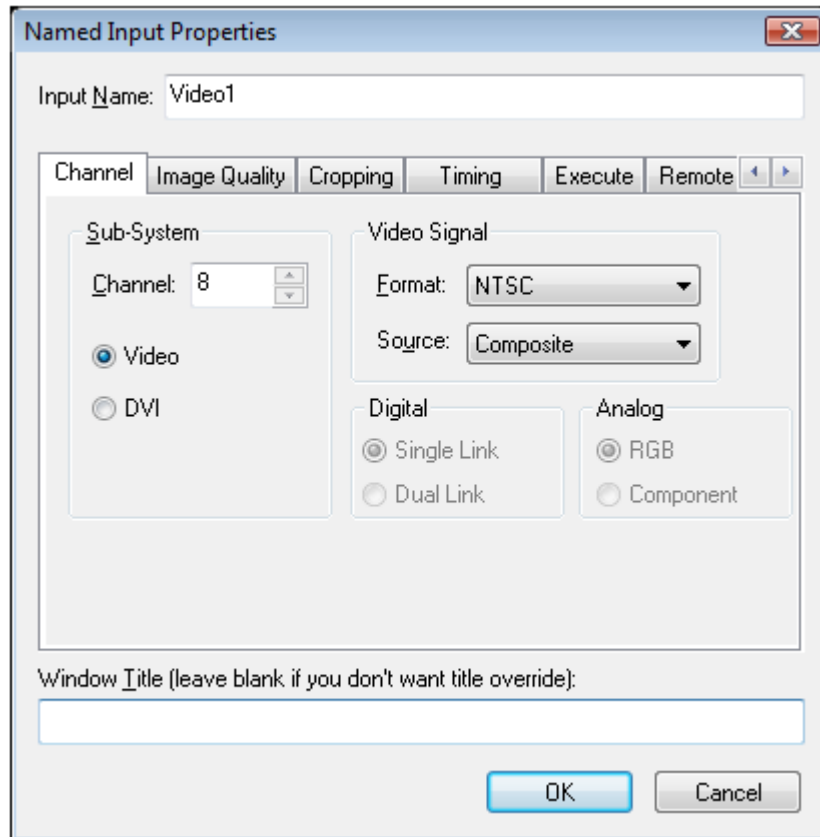


Figure 125 - Named Input for video window

5—Client Menu and Tool Bar

Using Named Inputs

Use a **Named Input** under the following conditions:

- You need to set special properties for a specific (Named) Video or DVI input source – usually due to needed adjustments – any property
- You need specific adjustments for a group of sources
- You need window properties without using a layout for the purpose
- You need to set window properties from a touch panel (may require two outputs – one to Fusion System and one to matrix switch.
- You need to open DVI windows very quickly without AutoDetect analyzing the signal which takes several seconds – Named Input is 'immediate'.

You need to use serial output to control external device (e.g. matrix) without need for touch panel (serial output utility), or execute another such controlling application (not meant for general application execution – use menu item or Application Object.)

Named Inputs can be used to set only the Properties seen in the Named Input. These Property pages are Channel, Image Quality, Cropping, RGB Timing, and Execute ([Figure 126](#)). Note that Size and Position and Frame and Title are not part of the Named Input's Properties. These are part of the properties for the window into which the Named Input will load. The window will either have already been open manually or part of a layout where the Named Input is applied.

View Menu

Editing a Named Input

Select **Properties** from the context menu of the selected **Named Input** to open the **Named Input** Object properties. The following figure shows typical Named Input properties.

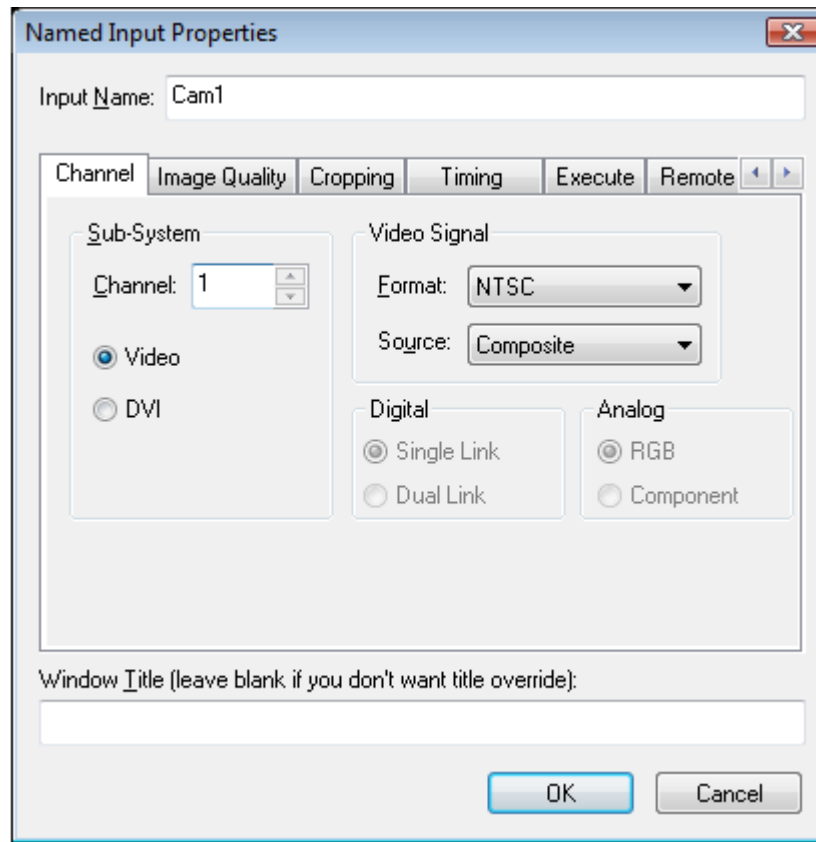


Figure 126 - Named Input Properties

Input Name specifies the name of the input object. The object will be referenced by this name when applying it to ControlPoint windows. The name must be unique for Named Input objects and be a valid Windows file name (characters `*?|<>\` are not allowed).

Window Title specifies the title of the ControlPoint window when the named input is applied. Leave this field blank if title override is not desirable. To set a blank title, enter a space character in the edit-box.

Channel Tab

Sub-System (Video or DVI) defines the type of window. The selected channel number refers to the physical input channel. If channel 0 is specified, the currently selected channel in the ControlPoint window will be preserved when the named input is applied.

5—Client Menu and Tool Bar

Video Signal for Video specifies the video format, NTSC PAL etc. The Source defines either Composite or S-Video.

Image Quality Tab

The **Image Quality** page controls the brightness, contrast, hue, and saturation parameters for the input signal.

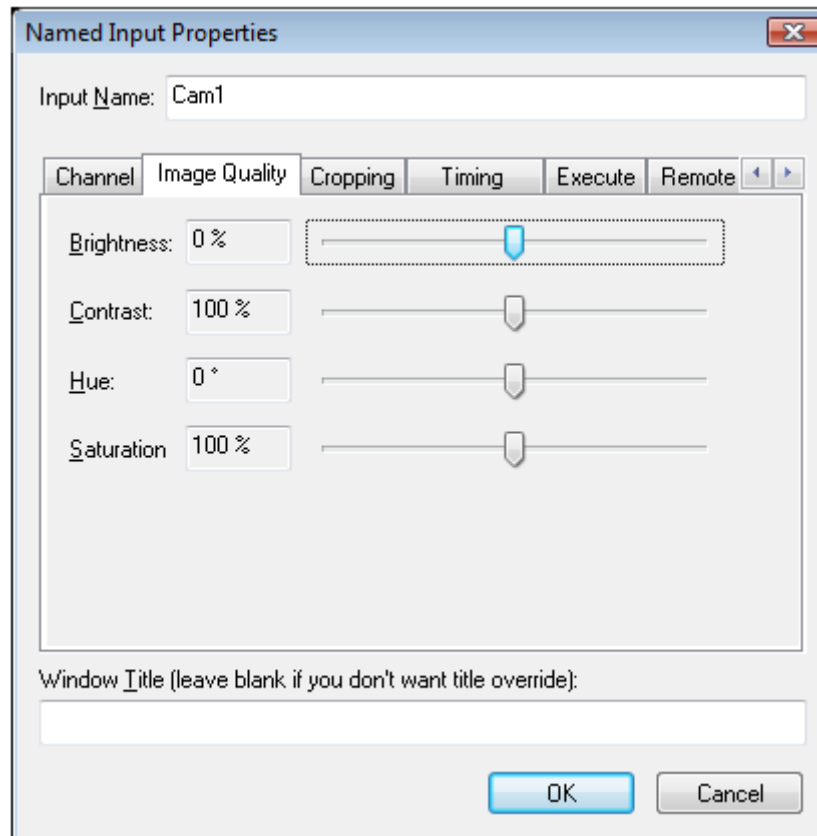


Figure 127 - Named Input Image Quality

For DVI capture, only brightness and contrast are available. Use the sliders to change the parameters.

View Menu

Cropping Tab

The **Cropping** tab presents the following page containing the controls to adjust the cropping source image.

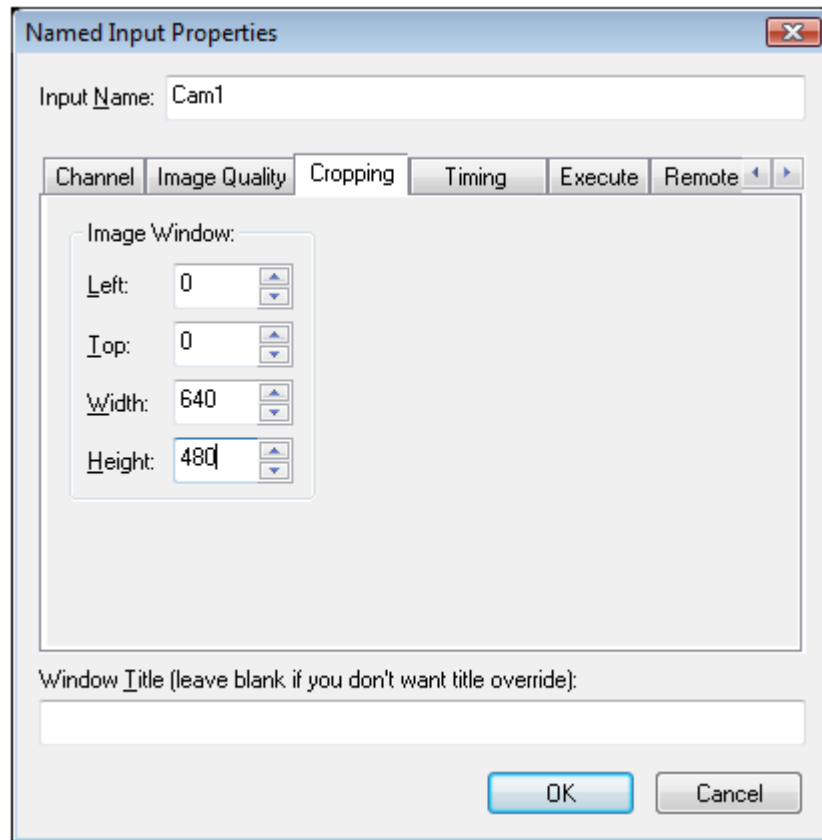


Figure 128 - Named Input Cropping

The values specify the number of lines cropped from the top and bottom of the image. It also specifies the width and height of the image. If you don't want cropping, set all values to zero.

5—Client Menu and Tool Bar

Timing Tab

The **Timing** tab contains the controls to set timing parameters for a DVI source.

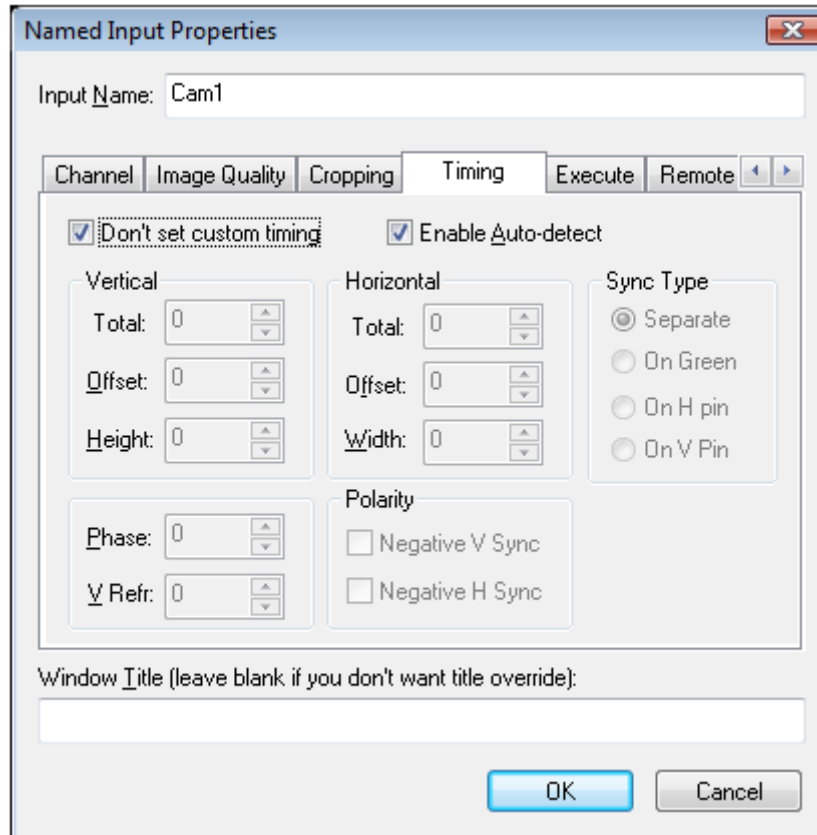


Figure 129 - Named Input Timing

Clear **Don't set custom timing** if you need to explicitly specify timing parameters for signal.

Enable Auto-detect activates the timing **auto-detection** feature of ControlPoint for the **DVI** input. It can be used independently from the custom timing settings.

View Menu

Execute Tab

The **Execute** tab lets the user define a list of applications to be executed in order when the named input is selected into a window.

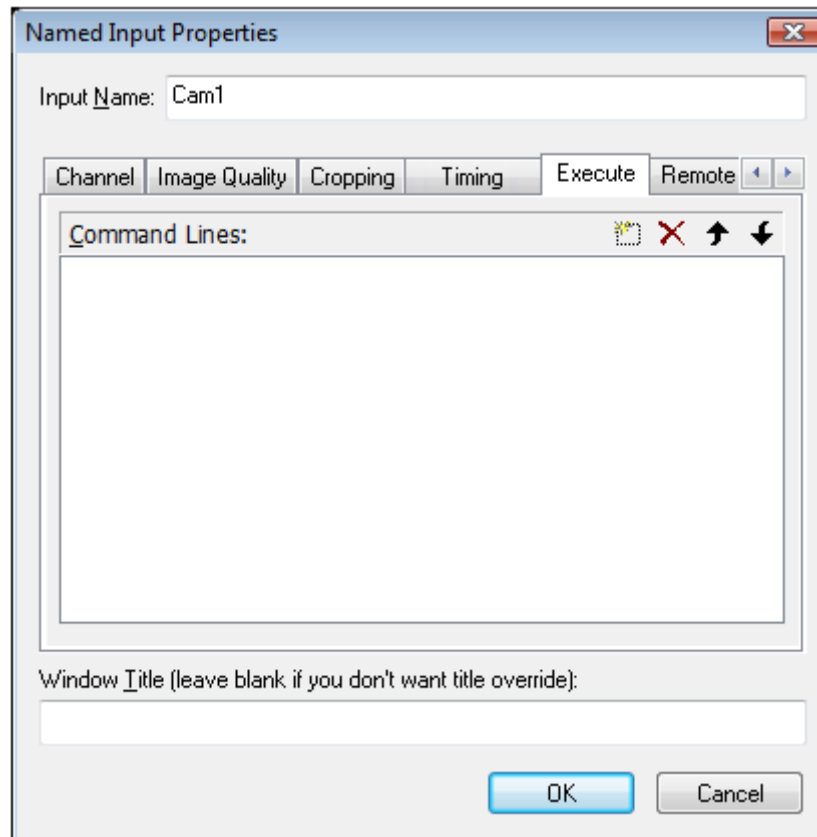


Figure 130 - Named Input Execute

- Click on the following icon:



to add a new command-line to execute.

- Click on the following icon:



to delete an entry from the list.

5—Client Menu and Tool Bar

- Click on the following icon:



to move an item up in the list.

- Click on the following icon:



to move an item down in the list.

The order of the list determines the execution order when ControlPoint executes the applications.

Remote Cursor Tab

The **Remote Cursor** tab contains the controls to set the name or IP Address for a remote computer. Refer to [“Named Inputs” on page 145](#) and [“DVI Capture Remote Cursor ” on page 121](#) for more details on DVI Remote Cursor.

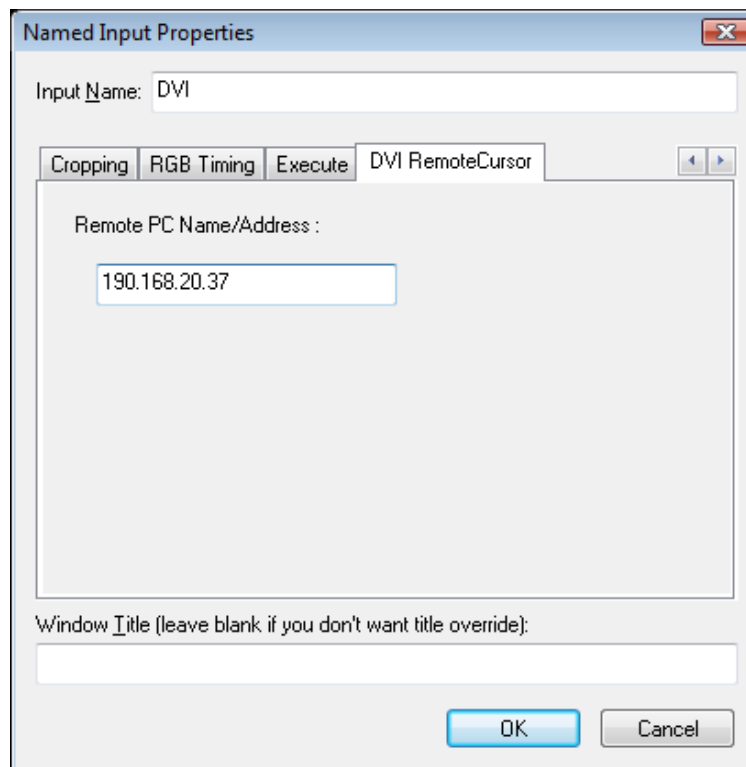


Figure 131 - Named Input for DVI Remote Cursor

View Menu

5.5.5.3.1 CPShare

CPShare has the following features:

- It is the ControlPoint integrated VNC (Virtual Network Computing) client.
- It allows the display of a remote system over an Ethernet connection.
- It allows control of that remote system being displayed
- It allows the control of a remote system over an Ethernet connection (any workstation).
- It requires the installation of a VNC Server on the system to be displayed and/or controlled.
- It is used to administer Streaming Video Systems attached to the system.

CPShare is the ControlPoint version of **VNC**. **CPShare** gives you the ability to display the content of a third party workstation on the Display Wall.

The use of a **RealVNC** server is recommended, although any VNC compatible server implementation can be used. **CPShare** objects provide the necessary connection information for the ControlPoint Server to connect to a VNC server on a remote workstation.

5—Client Menu and Tool Bar

The following diagram illustrates the connections used in a CPShare session.

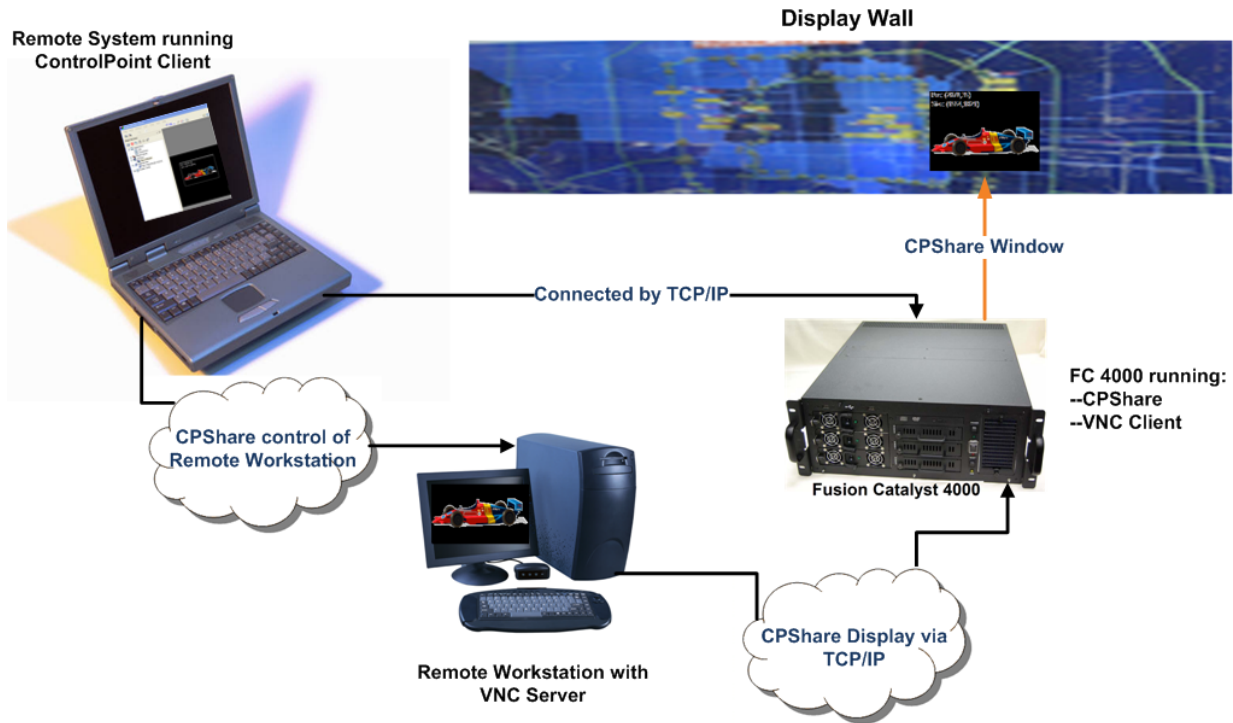


Figure 132 - CPShare Diagram

Note The use of a CPShare session requires the installation of a VNC Server on the workstation to be displayed.

As illustrated in **Figure 132**, CPShare requires the following connections to function:

- Fusion Wall Controller (VNC Client)
- Remote Workstation (ControlPoint)
- Source (displayed) System (VNC Server)

View Menu

Creating a CPShare Connection

1. Open the ControlPoint Remote Client either remotely or locally on the Wall Controller. Open the Object Browser. Select the CPShare page or list item.
2. Select **New...** from the context menu or the tool bar button. This opens a dialog-box to enter the parameters of the CPShare connection. Specify the connection parameters and the save by clicking **OK**.

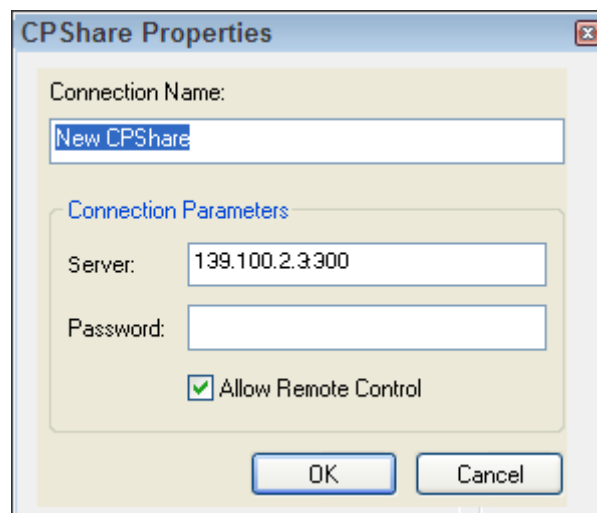


Figure 133 - CPShare Properties

Connection Name specifies the name of the connection and the title of the CPShare window displaying the image for the connection.

Note If you need multiple windows displaying the same connection, create separate CPShare objects with different connection names, but the same connection parameters.

Server specifies the host name or IP address of a workstation running a VNC server that will be displayed on the Display Wall.

Password specifies the optional password required to connect to the VNC server. This is the password you entered when you installed the VNC Server on the workstation.

5—Client Menu and Tool Bar

Allow Remote Control allows ControlPoint clients to take control of the VNC server from their workstations. This feature opens a new window with the desktop of the remote system.

Invoking CPShare Windows

1. Select a connection object from the list.
2. Click on **Invoke** from the context menu. This opens a CPShare window on the display wall displaying the remote desktop. Objects can be invoked from the context menu, the tool bar, or by dragging and dropping the object onto the ControlPoint mimic desktop.

The following two figures illustrate the configuration dialogs for two recommended versions of VNC.

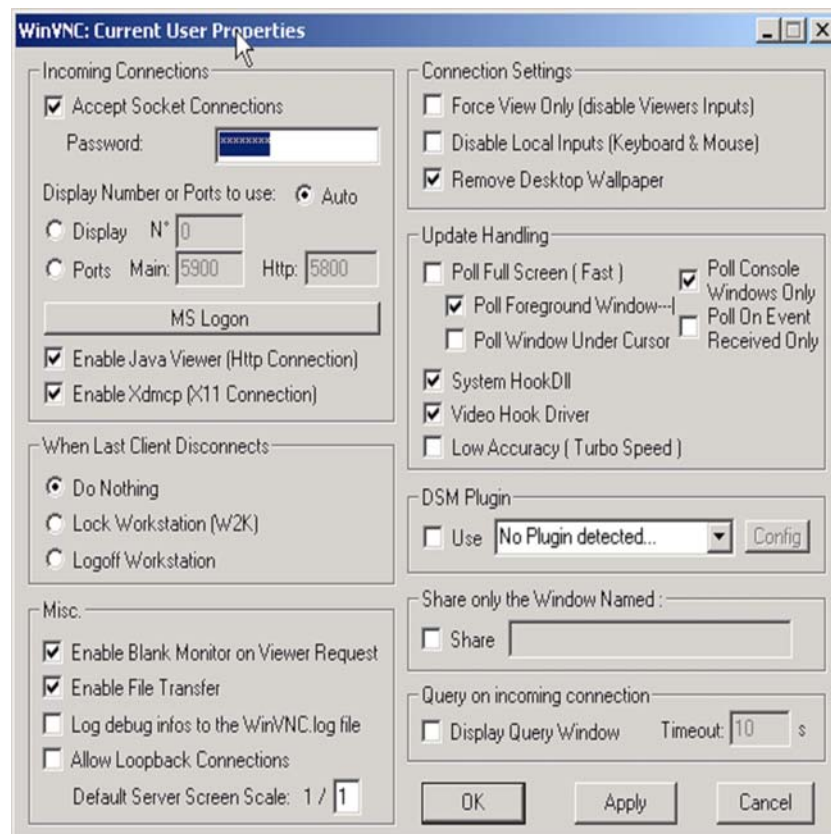


Figure 134 - Example UltraVNC Configuration Dialog

View Menu

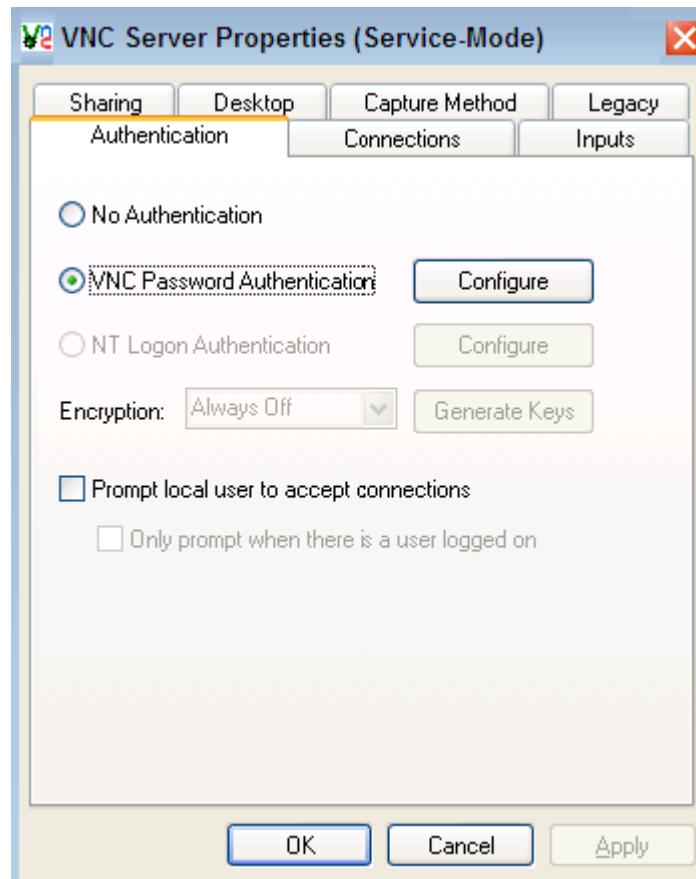


Figure 135 - Example RealVNC Configuration Dialog

5.5.5.3.2 VideoStream

VideoStream windows display MPEG 1, MPEG 2, and MPEG 4 encoded video streams on a display wall. MPEG video handled by VideoStream windows can consist of mixed transport and encoding methods, single or multicast.

Creating a VideoStream Source

The following procedure shows how to create a VideoStream Source:

1. Open **ControlPoint Client**
2. Open the **Object Browser**
3. Select **Streaming**
4. Right Click and select **New**, or use the tool bar button. -Dialogs follow.

5—Client Menu and Tool Bar

Note Setting up a Video Stream requires both Hardware and a Software configuration. The software configuration is the creation of the Streaming Video Object. Refer to the **Hardware Manual** or **Getting Started Guide** for instructions on Hardware Configuration.

Source Name specifies the name of the VideoStream source. This name will be used to select a source for your VideoStream window. The Source Name must be a unique name and will be used by the ControlPoint Server to address the stream.

Source Type specifies the type of the VideoStream source. Click the arrow to select a type from the list box.

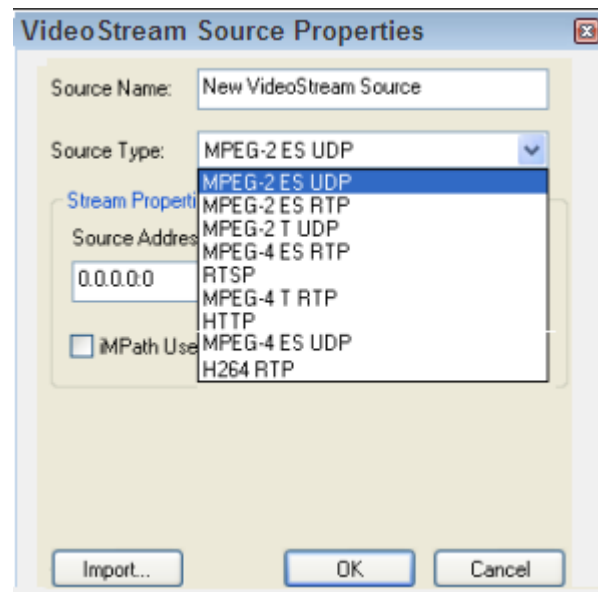


Figure 136 - VideoStream Source Properties

If you select **MPEG-2 ES UDP** (Elementary Stream) or **MPEG-2 T UDP** (Transport Stream) as the source type, the **Source Address (host address: port)** field will be displayed as shown in [Figure 137](#).

Contact the encoder manufacturer for more information about what protocol setting to use. (Jupiter Systems, Inc. has tested the following encoders: VBrick 4200 with MPEG-2 Transport protocol, iMPath 4100 with MPEG-2 ES UDP protocol, Teleste IPE301 with MPEG-2 Transport protocol.)

View Menu

Stream Properties. Enter the IP address and port for the camera or encoder of the stream source.

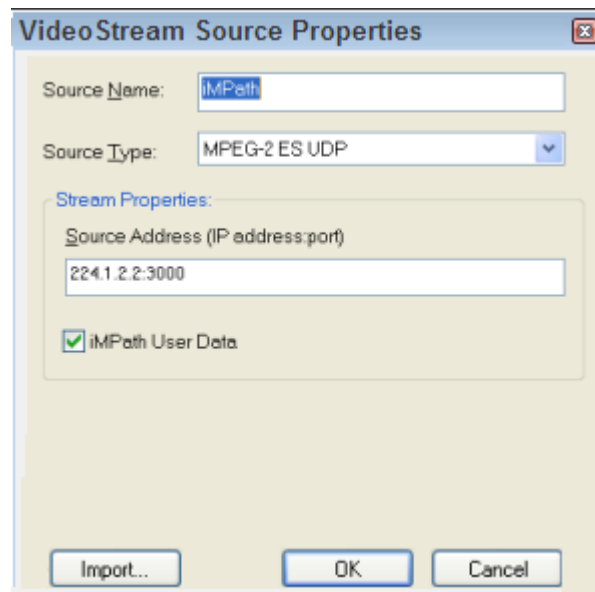


Figure 137 - VideoStream MPEG-2 ES UDP Source Type

Check the **iMPath User Data** box if you are using an iMPath 4100 encoder and want to enable the text overlay feature. Checking this box allows CPServer and SVS to retrieve user data from the iMPath 4100 encoder. Enabling User Data also requires setup in the Hardware Configuration

5—Client Menu and Tool Bar

If you select **MPEG-2 ES RTP** (Elementary Stream) as the source type, the **Source Address (host address:port)** and the **Enable RTCP** fields will be displayed as shown below. Contact the encoder manufacturer for more information about what protocol setting to use.

Stream Properties Enter the IP address and port for the camera or encoder of the stream source. If your encoder supports RTCP, check the **Enable RTCP** box to enable RTCP in conjunction with RTP.

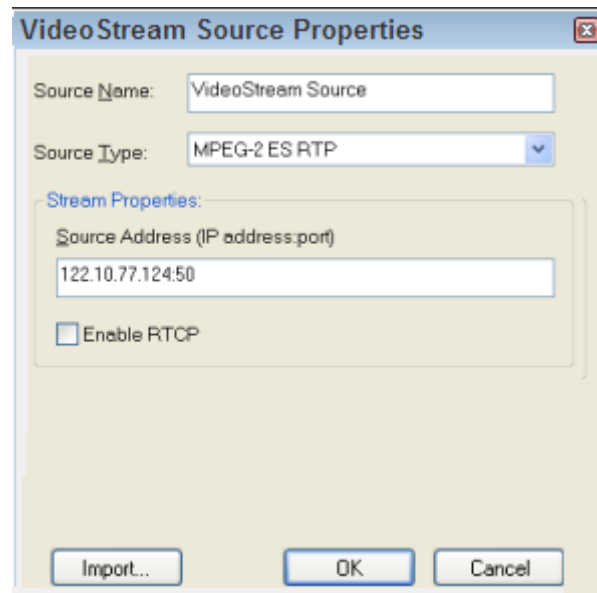


Figure 138 - VideoStream Source MPEG-2 ES RTP Source Type

View Menu

If you select **MPEG-4 ES RTP** (Elementary Stream) as the source type, the **Source Address (host address:port)**, **Decoder Config Data** and the **Enable RTCP** fields will be displayed. Enter the decoder's configuration data in the **Decoder Config Data** field. If you are not familiar with the Decoder Config Data, you can try to use the **Import** feature to obtain the information from the active VideoStream decoders.

Stream Properties Enter the IP address and port for the camera or encoder of the stream source. If applicable for the encoder, check the **Enable RTCP** box to enable RTCP in conjunction with RTP.

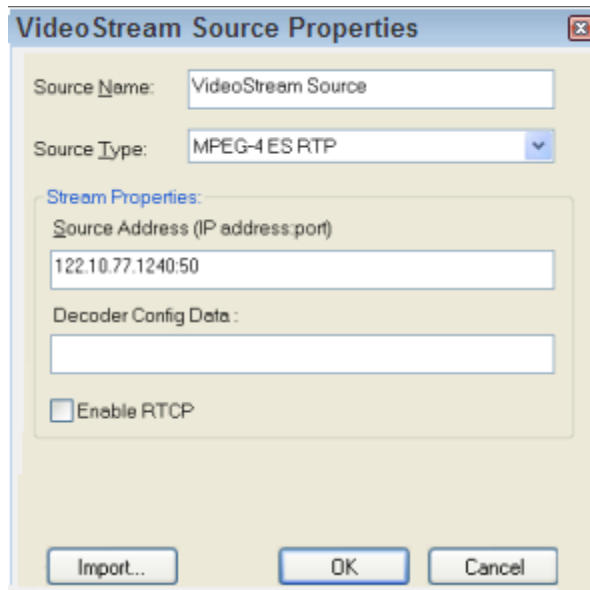


Figure 139 - VideoStream MPEG-4 ES RTP Source Type

5—Client Menu and Tool Bar

If you select **MPEG-4 T RTP** (Elementary Stream) as the source type, the **Source Address (host address:port)**, **Decoder Config Data** and the **Enable RTCP** fields will be displayed. Enter the decoder's configuration data in the **Decoder Config Data** field. If you are not familiar with the Decoder Config Data, you can try to use the **Import** feature to obtain the information from the active VideoStream decoders.

Stream Properties Enter the IP address and port for the camera or encoder of the stream source.

Payload Type This identifies the format of the RTP payload and determines its interpretation by the application. If RTP payload is unknown, use a default value of -1.

If applicable for the encoder, check the **Enable RTCP** box to enable RTCP in conjunction with RTP.

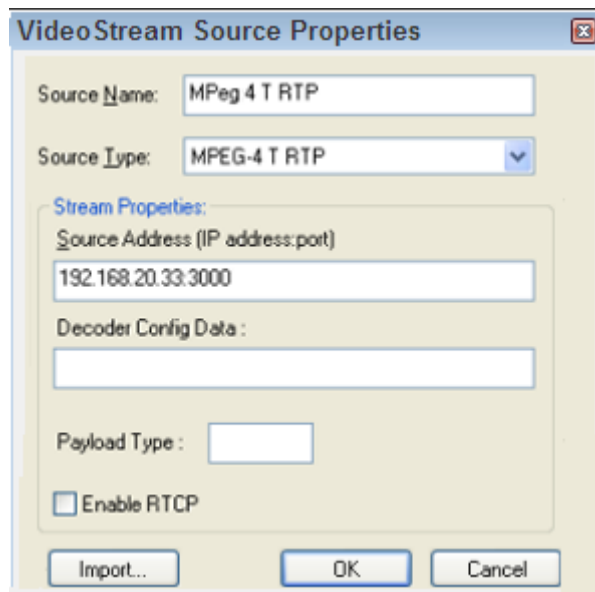


Figure 140 - VideoStream MPEG-4 T RTP Source Type

View Menu

If you select **MPEG-4 ES UDP** (Elementary Stream) as the source type, the **Source Address (host address : port)** field will be displayed as shown below.

Contact the encoder manufacturer for more information about what protocol setting to use.

Stream Properties Enter the IP address and port for the camera or encoder of the stream source.

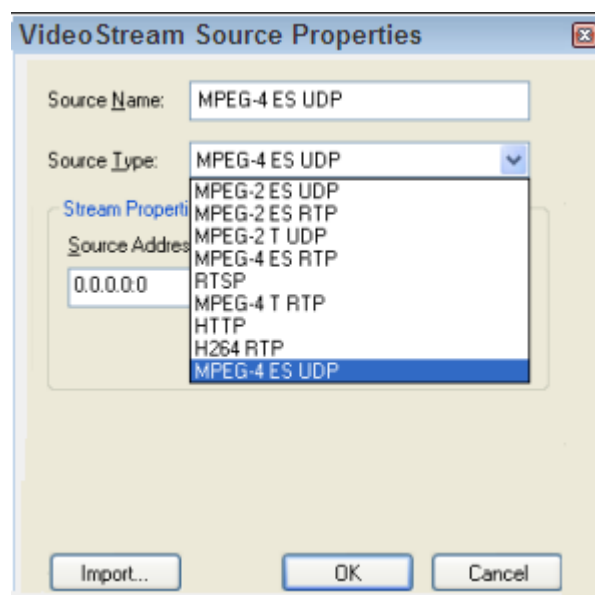


Figure 141 - VideoStream MPEG-4 ES UDP Source Type

5—Client Menu and Tool Bar

If you select **RTSP** as the source type, the **Stream Location** field will be displayed as shown below.

Stream Location Enter the URL for the camera or encoder of the stream source. The URL address must start with "rtsp://" as shown in [Figure 142](#).

Network Protocol When RTSP is the source type, the **Network Protocol** section will display as shown below. RTSP can be received over three network protocol options:

- UDP
- TCP/IP
- HTTP

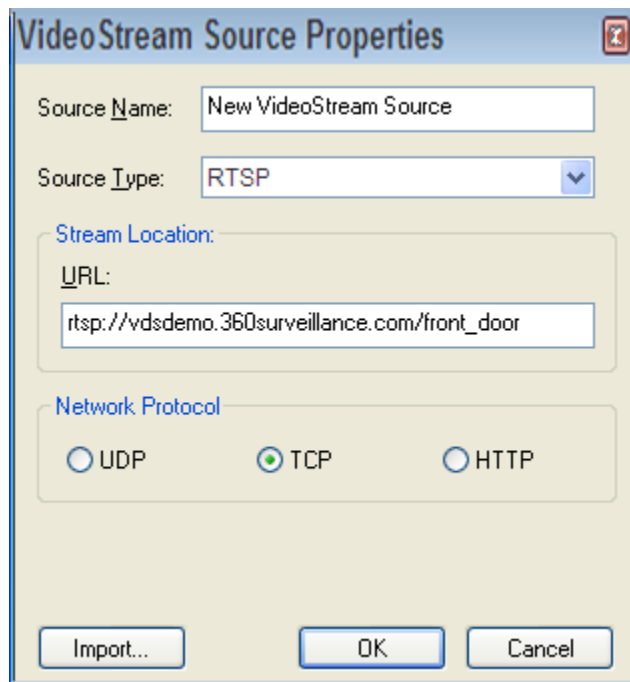


Figure 142 - VideoStream RTSP Source Type

Click the **Import** button to display the **Import SAP** dialog. If there are active decoders on line, they will show in the **SAP Sessions** list (Session Application Protocol). Select the desired session, and then click **OK**. The decoder's configuration data will be added to the **Decoder Config Data** field.

View Menu

If you select **HTTP** as the source type, the **Stream Location** field will be displayed as shown below.

Stream Location Enter the URL for the camera or encoder of the stream source. The URL address must start with "http://" as shown in **Figure 143**.

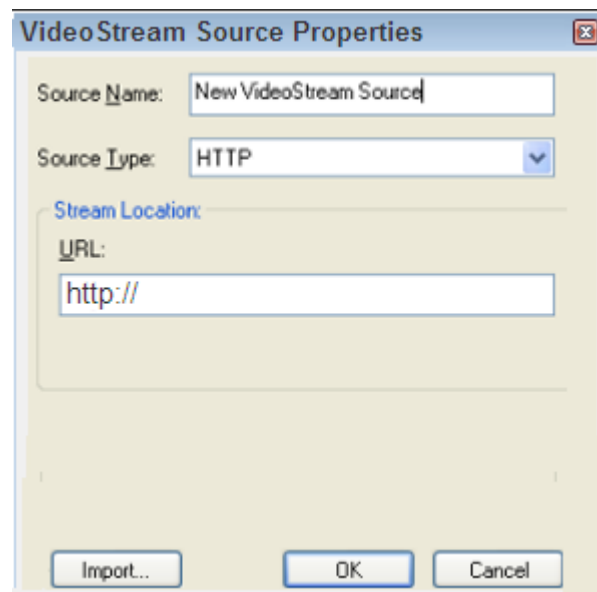


Figure 143 - VideoStream HTTP Source Type

Click the **Import** button to display the **Import SAP** dialog as shown below. If there are active decoders on line, they will show in the **SAP Sessions** list (Session Application Protocol). Select the desired session, and then click **OK**. The decoder's configuration data will be added to the **Decoder Config Data** field.

5—Client Menu and Tool Bar

If you select **H264 RTP** (Elementary Stream) as the source type, the **Source Address (host address:port)**, **Payload Type**, and the **Enable RTCP** fields will be displayed.

Stream Properties Enter the IP address and port for the camera or encoder of the stream source.

Payload Type This identifies the format of the RTP payload and determines its interpretation by the application. If RTP payload is unknown, use a default value of -1.

If applicable for the encoder, check the **Enable RTCP** box to enable RTCP in conjunction with RTP.

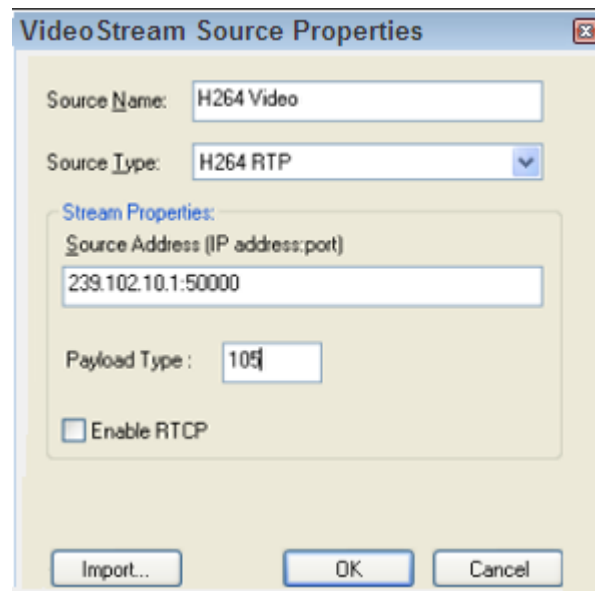


Figure 144 - VideoStream H264 RTP Source Type

Use the **Import** button to display the **Import SAP** dialog as shown below. If there are active decoders on line, they will show in the **SAP Sessions** list (Session Application Protocol). Select the desired session, and then click **OK**.

View Menu

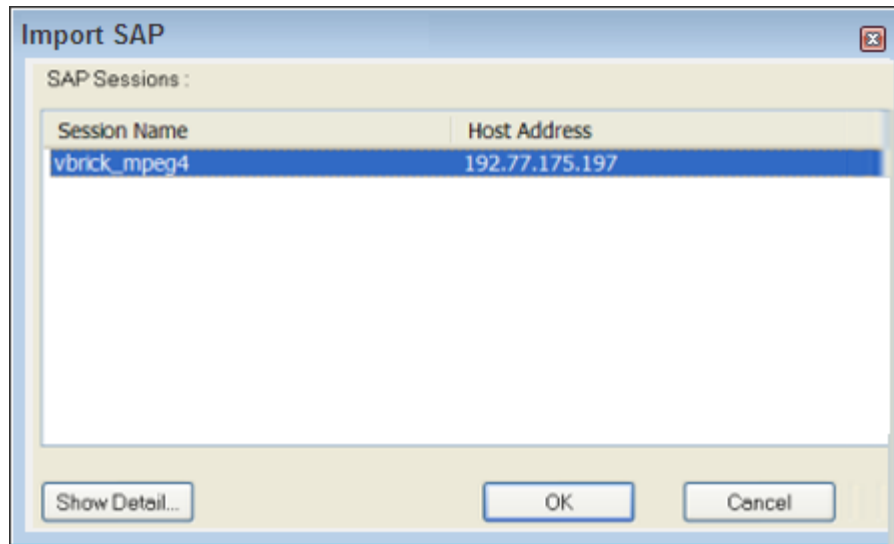


Figure 145 - VideoStream RTSP Import SAP

Press the **Show Detail** button to display the **SDP Message Data** (Session Description Protocol) dialog as shown below. The dialog shows the detailed information of the selected SAP session.

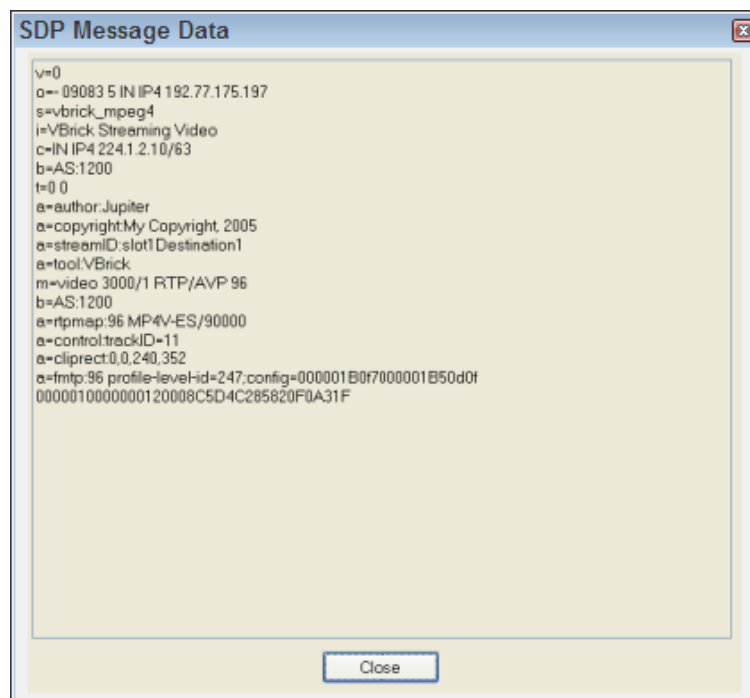


Figure 146 - Example of SDP Message Data

5—Client Menu and Tool Bar

5.5.5.4 IPStream

IPStream windows display MPEG, H.264, and MJPEG encoded streams on a display wall. IPStream windows can consist of mixed transport and encoding methods, single or multicast.

Playing an IPStream on Client

In order to review a stream on the Client, a software decoder is available.

1. Open **ControlPoint Client**
2. Open the **Object Browser**
3. Select **IPStream**
4. Right-Click on the desired stream and select **Play Stream on Client**.

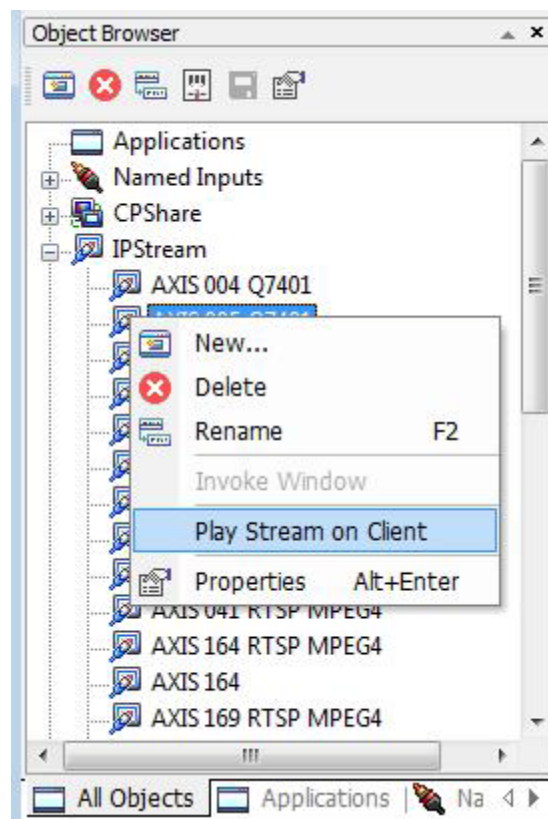


Figure 147 - Play Stream on Client

VideoStreams also have the **Play Stream on Client** option.

View Menu

Creating an IPStream Source

The following procedure shows how to create an IPStream Source:

1. Open **ControlPoint Client**
2. Open the **Object Browser**
3. Select **IPStream**
4. Right Click and select **New**, or use the tool bar button. Then follow dialogs.

Note Setting up an IPStream requires both Hardware along with a Software configuration. The software configuration is the creation of the IPStream Object. Refer to the **Hardware Manual** or **Getting Started Guide** for instructions on Hardware Configuration.

Source Name specifies the name of the IPStream source. This name will be used to select a source for your IPStream window. The Source Name must be a unique name and will be used by the ControlPoint Server to address the stream.

Source Type specifies the type of the IPStream source. Click the arrow to select a type from the list box.

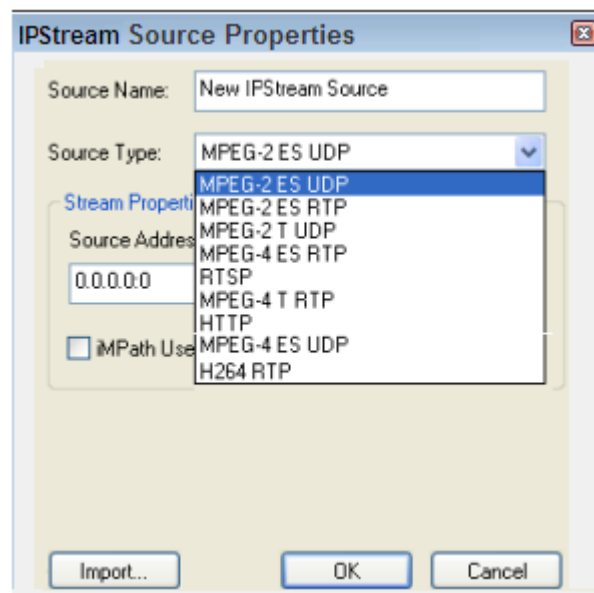


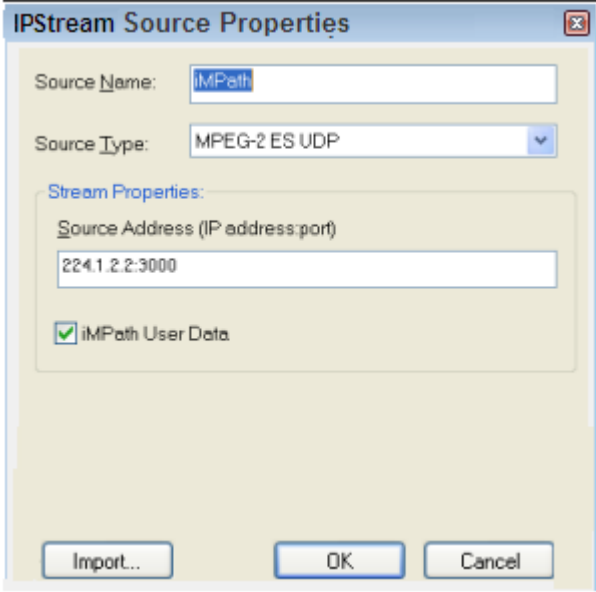
Figure 148 - IPStream Source Properties

5—Client Menu and Tool Bar

If you select **MPEG-2 ES UDP** (Elementary Stream) or **MPEG-2 T UDP** (Transport Stream) as the source type, the **Source Address (host address : port)** field will be displayed as shown below.

Contact the encoder manufacturer for more information about what protocol setting to use. (Jupiter Systems, Inc. has tested the following encoders: VBrick 4200 with MPEG-2 Transport protocol, iMPath 4100 with MPEG-2 ES UDP protocol, Teleste IPE301 with MPEG-2 Transport protocol.)

Stream Properties—Enter the IP address and port for the camera or encoder of the stream source.



The image shows a Windows-style dialog box titled "IPStream Source Properties". It contains the following fields and controls:

- Source Name:** A text box containing "iMPath".
- Source Type:** A dropdown menu currently set to "MPEG-2 ES UDP".
- Stream Properties:** A section containing:
 - Source Address (IP address:port):** A text box containing "224.1.2.2:3000".
 - iMPath User Data:** A checkbox that is checked.
- Buttons:** "Import...", "OK", and "Cancel" at the bottom.

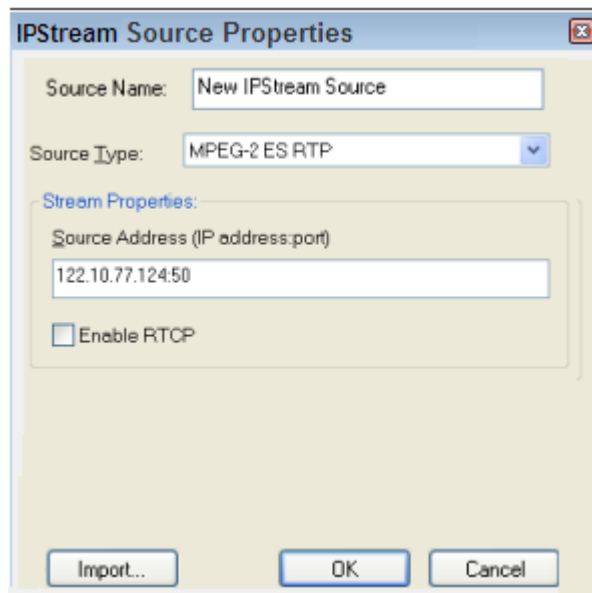
Figure 149 - IPStream MPEG-2 ES UDP Source Type

Check the **iMPath User Data** box if you are using an iMPath 4100 encoder and want to enable the text overlay feature. Checking this box allows CPServer and SVS to retrieve user data from the iMPath 4100 encoder. Enabling User Data also requires setup in the Hardware Configuration

View Menu

If you select **MPEG-2 ES RTP** (Elementary Stream) as the source type, the **Source Address (host address:port)** and the **Enable RTCP** fields will be displayed as shown below. Contact the encoder manufacturer for more information about what protocol setting to use.

Stream Properties—Enter the IP address and port for the camera or encoder of the stream source. If your encoder supports RTCP, check the **Enable RTCP** box to enable RTCP in conjunction with RTP.



The image shows a Windows-style dialog box titled "IPStream Source Properties". It contains the following fields and controls:

- Source Name:** A text box containing "New IPStream Source".
- Source Type:** A dropdown menu currently set to "MPEG-2 ES RTP".
- Stream Properties:** A section containing:
 - Source Address (IP address:port):** A text box containing "122.10.77.124:50".
 - Enable RTCP:** An unchecked checkbox.
- Buttons:** "Import...", "OK", and "Cancel" at the bottom.

Figure 150 - IPStream Source MPEG-2 ES RTP Source Type

5—Client Menu and Tool Bar

If you select **MPEG-4 ES RTP** (Elementary Stream) as the source type, the **Source Address (host address:port)**, **Decoder Config Data** and the **Enable RTCP** fields will be displayed. Enter the decoder's configuration data in the **Decoder Config Data** field. If you are not familiar with the Decoder Config Data, you can try to use the **Import** feature to obtain the information from the active IPStream decoders.

Stream Properties—Enter the IP address and port for the camera or encoder of the stream source. If applicable for the encoder, check the **Enable RTCP** box to enable RTCP in conjunction with RTP.

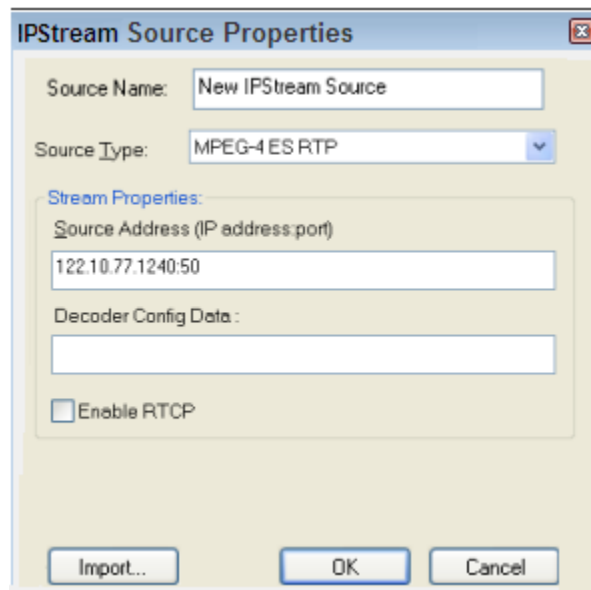


Figure 151 - IPStream MPEG-4 ES RTP Source Type

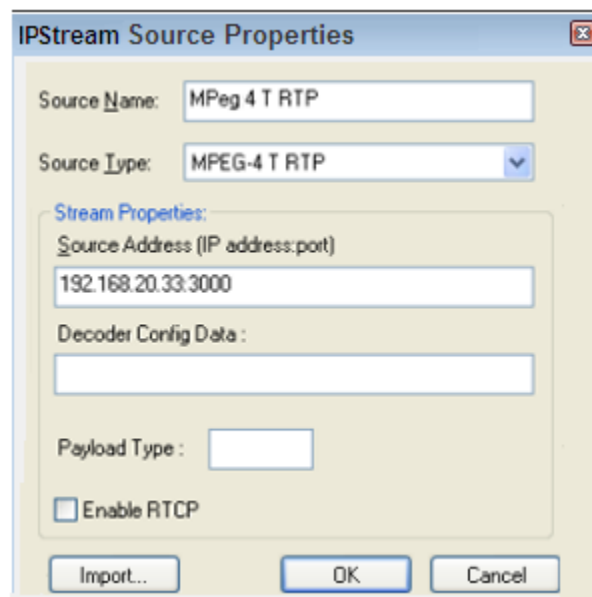
View Menu

If you select **MPEG-4 T RTP** (Elementary Stream) as the source type, the **Source Address (host address:port)**, **Decoder Config Data** and the **Enable RTCP** fields will be displayed. Enter the decoder's configuration data in the **Decoder Config Data** field. If you are not familiar with the Decoder Config Data, you can try to use the **Import** feature to obtain the information from the active IPStream decoders.

Stream Properties Enter the IP address and port for the camera or encoder of the stream source.

Payload Type This identifies the format of the RTP payload and determines its interpretation by the application. If RTP payload is unknown, use a default value of -1.

If applicable for the encoder, check the **Enable RTCP** box to enable RTCP in conjunction with RTP.



The image shows a Windows-style dialog box titled "IPStream Source Properties". It contains several input fields and a checkbox. The "Source Name" field is filled with "MPeg 4 T RTP". The "Source Type" dropdown menu is set to "MPEG-4 T RTP". Under the "Stream Properties" section, the "Source Address (IP address:port)" field contains "192.168.20.33:3000". The "Decoder Config Data" field is empty. The "Payload Type" field is also empty. At the bottom, there is an unchecked checkbox labeled "Enable RTCP". At the very bottom of the dialog are three buttons: "Import...", "OK", and "Cancel".

Figure 152 - IPStream MPEG-4 T RTP Source Type

5—Client Menu and Tool Bar

If you select **MPEG-4 ES UDP** (Elementary Stream) as the source type, the **Source Address (host address : port)** field will be displayed as shown below.

Contact the encoder manufacturer for more information about what protocol setting to use.

Stream Properties Enter the IP address and port for the camera or encoder of the stream source.

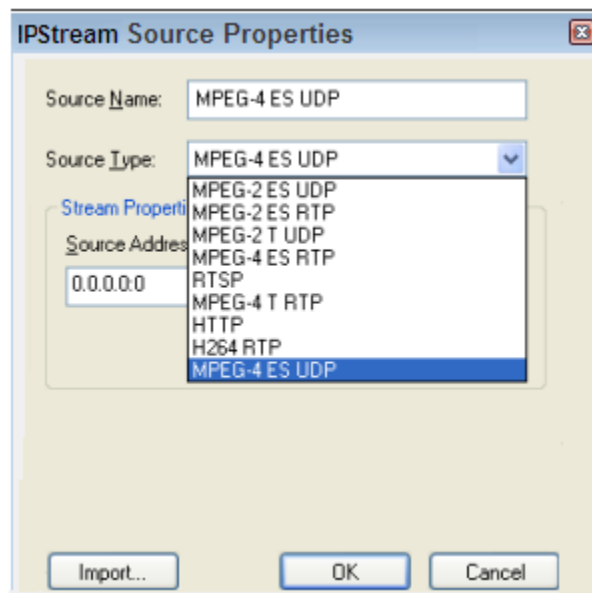


Figure 153 - IPStream MPEG-4 ES UDP Source Type

View Menu

If you select **RTSP** as the source type, the **Stream Location** field will be displayed as shown below.

Stream Location Enter the URL for the camera or encoder of the stream source. The URL address must start with "rtsp://" as shown in [Figure 154](#).

Network Protocol When RTSP is the source type, the **Network Protocol** section will display as shown below. RTSP can be received over three network protocol options:

- UDP
- TCP/IP
- HTTP

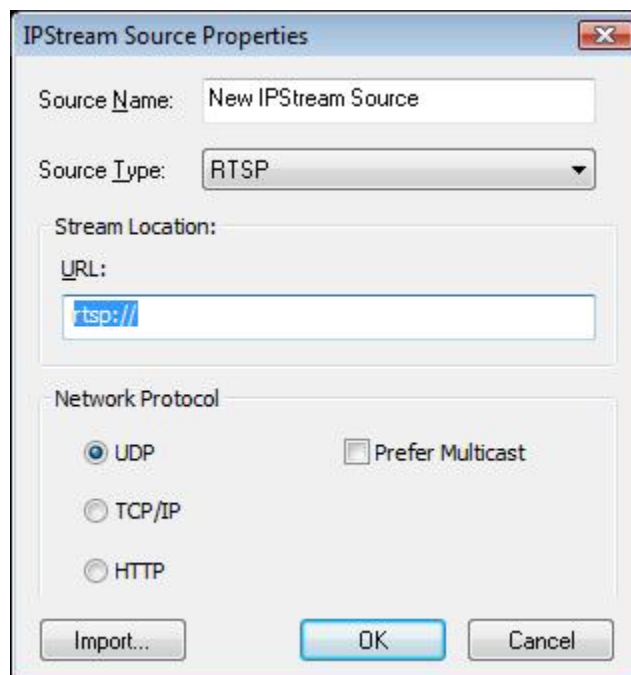


Figure 154 - IPStream RTSP Source Type

Prefer Multicast

- This option is only enabled when UDP is selected. When TCP/IP or HTTP is selected, this option is disabled.

5—Client Menu and Tool Bar

- Selecting this option makes multicasting the preferred option for UDP streams. When this option is not selected, the streams will only be sent in unicast mode.

Click the **Import** button to display the **Import SAP** dialog. If there are active decoders on line, they will show in the **SAP Sessions** list (Session Application Protocol). Select the desired session, and then click **OK**. The decoder's configuration data will be added to the **Decoder Config Data** field.

If you select **HTTP** as the source type, the **Stream Location** field will be displayed as shown below.

Stream Location Enter the URL for the camera or encoder of the stream source. The URL address must start with "http://" as shown in [Figure 155](#).

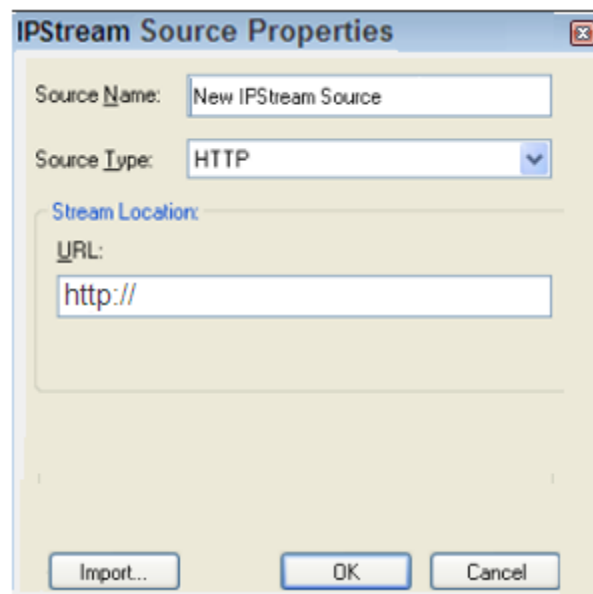


Figure 155 - IPStream HTTP Source Type

Click the **Import** button to display the **Import SAP** dialog as shown below. If there are active decoders on line, they will show in the **SAP Sessions** list (Session Application Protocol). Select the desired session, and then click **OK**. The decoder's configuration data will be added to the **Decoder Config Data** field.

View Menu

If you select **H264 RTP** (Elementary Stream) as the source type, the **Source Address (host address:port)**, **Payload Type**, and the **Enable RTCP** fields will be displayed.

Stream Properties Enter the IP address and port for the camera or encoder of the stream source.

Payload Type This identifies the format of the RTP payload and determines its interpretation by the application. If RTP payload is unknown, use a default value of -1.

If applicable for the encoder, check the **Enable RTCP** box to enable RTCP in conjunction with RTP.

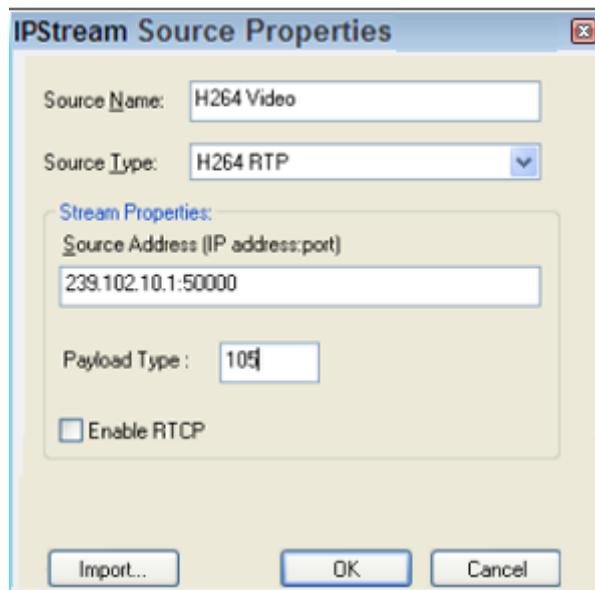
The image shows a Windows-style dialog box titled "IPStream Source Properties". It contains several input fields and a checkbox. The "Source Name" field is set to "H264 Video". The "Source Type" is a dropdown menu currently showing "H264 RTP". Below this, there is a section titled "Stream Properties:" which contains a "Source Address (IP address:port)" field set to "239.102.10.1:50000", a "Payload Type:" field set to "105", and an "Enable RTCP" checkbox which is currently unchecked. At the bottom of the dialog are three buttons: "Import...", "OK", and "Cancel".

Figure 156 - IPStream H264 RTP Source Type

Use the **Import** button to display the **Import SAP** dialog as shown below. If there are active decoders on line, they will show in the **SAP Sessions** list (Session Application Protocol). Select the desired session, and then click **OK**.

5—Client Menu and Tool Bar

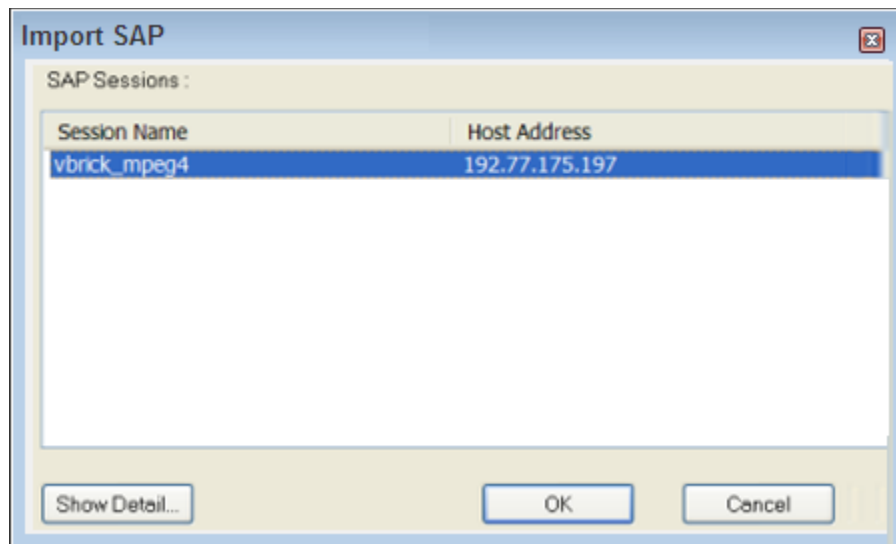


Figure 157 - IPStream RTSP Import SAP

5.5.5.4.1 Image Cache

Click the **Object Browser** window and select an item from the Image Cache trunk on the All Objects tab or on the Image Cache tab. Press the right mouse button, a context menu as the following will show up.

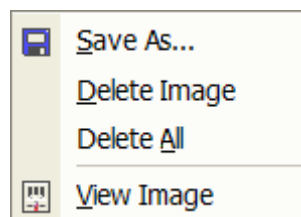


Figure 158 - Image Cache Menu

Save As to save the selected image to the local PC. A File Save dialog will prompt you for the file name.

Delete Image to delete the selected image. A warning message will show up for confirmation.

Delete All to delete all of the images. A warning message will show up for confirmation.

View Image to view the selected image. The image will be opened by the default tool which is set to be associated with the image file extension.

View Menu

5.5.5.5 PixelNet Input Object

PixelNet Input objects represent the PixelNet input nodes (DVI and HD, and 3G-SDI input types). Unlike other types of objects, PixelNet Input objects are not created by the user. They appear on the Object Browser when those input nodes are connected to the PixelNet.

This PixelNet Input tab provides a list of the PixelNet input devices with detailed information.

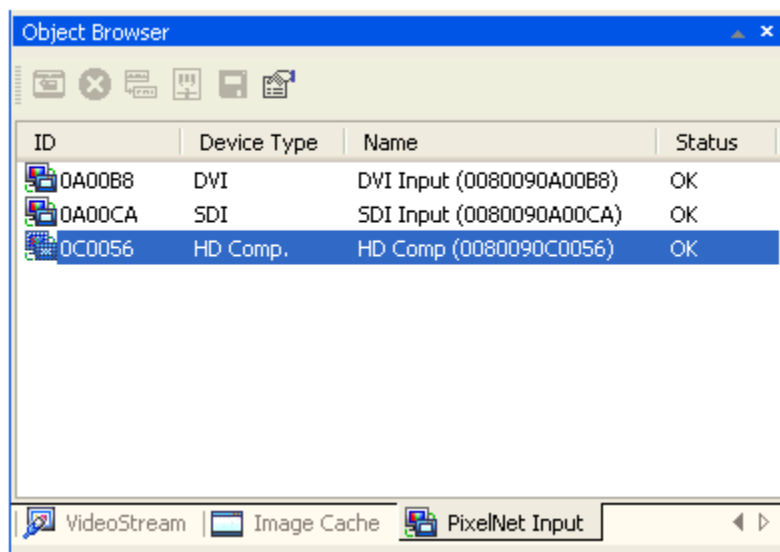


Figure 159 - PixelNet Input Object Tab

ID

Device ID, the last six digits of the MAC address of the node on the PixelNet.

5—Client Menu and Tool Bar

Device Type

PixelNet device type (DVI – DVI Input, HD Comp. – HD Component Input, and 3G-SDI Input).

Name

User defined name for the device.

Status

Current status for the device.

5.5.5.6 PixelNet Input Properties

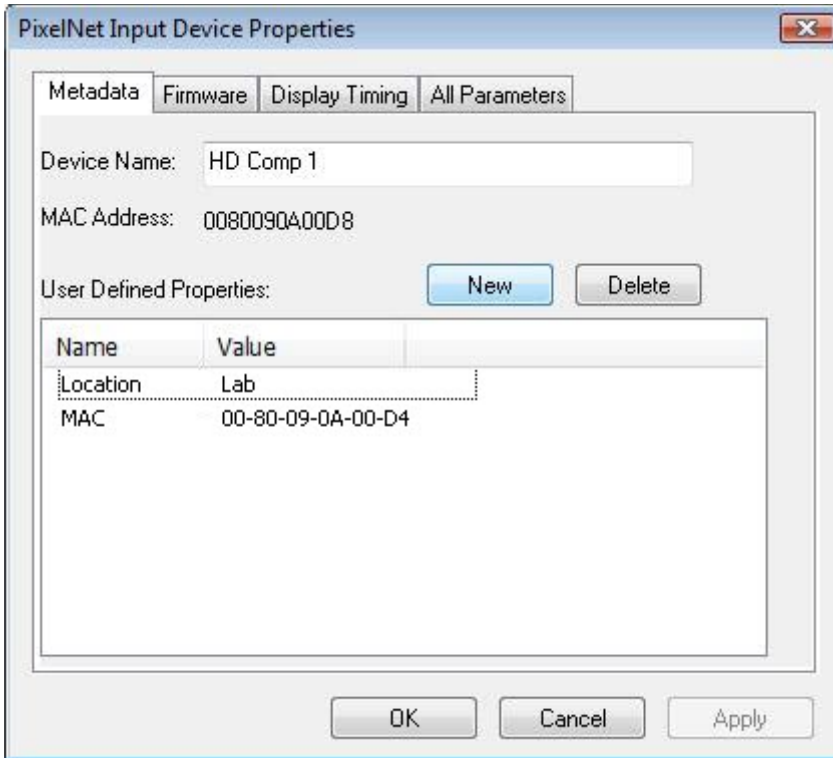
Go to the **Object Browser** window and select an item from the PixelNet Input trunk on the **All Objects** tab or on **PixelNet Input** tab. Click the right mouse button, a context menu will show up as follows:



Figure 160 - Object Context Menu

To review the PixelNet Input properties, select an object from the list and click **Properties**. Doing so, the PixelNet Input Device Properties dialog will display as shown below with the Metadata tab active.

View Menu



The screenshot shows the 'PixelNet Input Device Properties' dialog box with the 'Metadata' tab selected. The 'Device Name' is 'HD Comp 1' and the 'MAC Address' is '0080090A00D8'. There are 'New' and 'Delete' buttons for 'User Defined Properties'. A table lists two properties: 'Location' with value 'Lab' and 'MAC' with value '00-80-09-0A-00-D4'. At the bottom are 'OK', 'Cancel', and 'Apply' buttons.

Name	Value
Location	Lab
MAC	00-80-09-0A-00-D4

Figure 161 - PixelNet Input Device Properties – Metadata

PixelNet Input nodes allow the user to assign metadata for identification. For example, the device name is metadata. The metadata is arranged in a dictionary, every item contains a name and a value. The total number of characters of the metadata is limited to 1024, including the name and the value.

Device Name

Enter text here to change name of the input node. The factory has set a default name based upon the MAC address of the input node.

Note, input names on the PixelNet have to be unique.

User Defined Properties

This list contains all the metadata items. To edit an item, double click on the item, an in-line box will open for editing. After entering the data, click the **Enter** key. Upon finishing all editing, click **OK** to save the metadata to the input node.

New

Click **New** button to create a new metadata item. When doing so, an in-line box will open for data. After entering the data, click the **Enter** key.

5—Client Menu and Tool Bar

Delete

To delete a metadata item, select an item on the metadata list, then click the **Delete** button to delete that item.

Firmware Tab

The **Firmware** tab presents the firmware version number and the device type for the input node.



Figure 162 - PixelNet Input Device Properties – Firmware

In the **Firmware File** field, enter the following path, "C:\Program Files\Jupiter\Firmware", to the desired update file or Browse to the desired file. Each node type will have a firmware file listed.

Update Firmware

This button starts the update firmware process. After selecting a firmware file, click the **Update Firmware** button. The update progress will be shown in the progress bar. Updating the input device firmware takes a few minutes and a progress message will be shown. Upon finishing updating the firmware, the system will reset the input device.

Reset Device

Clicking the **Reset Device** button resets the input node.

View Menu

5.5.5.6.1 Object Browser Tool Bar



Figure 163 - Object Browser Tool Bar

Besides the context menu, the tool bar provides another convenient way to operate on a subset of object items.



New – to create a new object



Delete – to delete the selected object



Rename – to rename the selected object



Invoke – to invoke the selected object, or for Image Cache, to view the selected image



Save As – to save the selected image to the local PC.



Properties – to open the properties dialog for the object.

5—Client Menu and Tool Bar

5.5.5.6.2 Drag and Drop Objects

Drag & Drop allows you to easily open a new window or to invoke a system application with predefined parameters by dragging the objects to the desktop in the ControlPoint Client.

Open the **Object Browser**, select the desired object and drag it to the desktop.

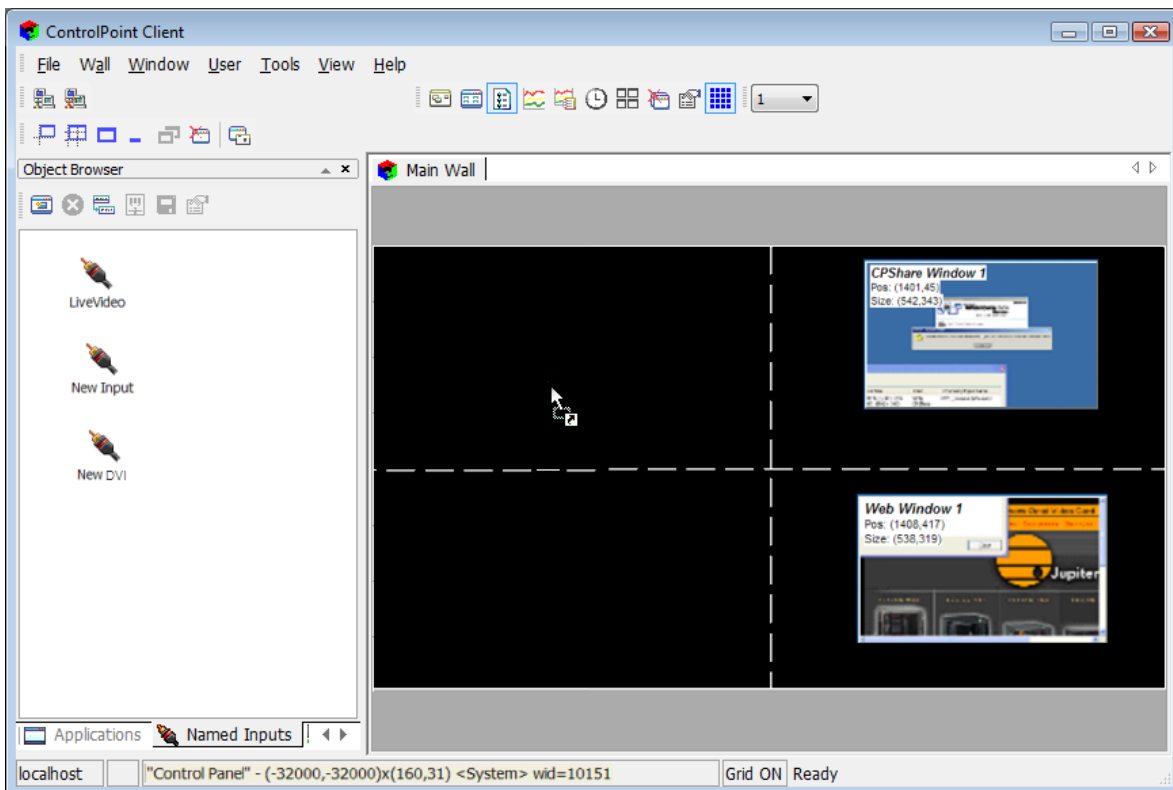


Figure 164 - Drag and Drop

You may see the mouse cursor change its shape. If the cursor shape is like the one on [Figure 165](#), it means that the object can be dropped; otherwise, it is not allowed to be dropped.

View Menu



Figure 165 - Drag and Drop (magnified)

5.5.6 System Monitoring

System Monitoring opens a display similar to the ones shown in the figure below. The display shows the operating parameters of many sub-systems in the Wall Controller. If any of these items goes above or below programmed limits, the item will be high-lighted in red (e.g., fan removal shown in [Figure 167](#)) and you will see a message in the event log.

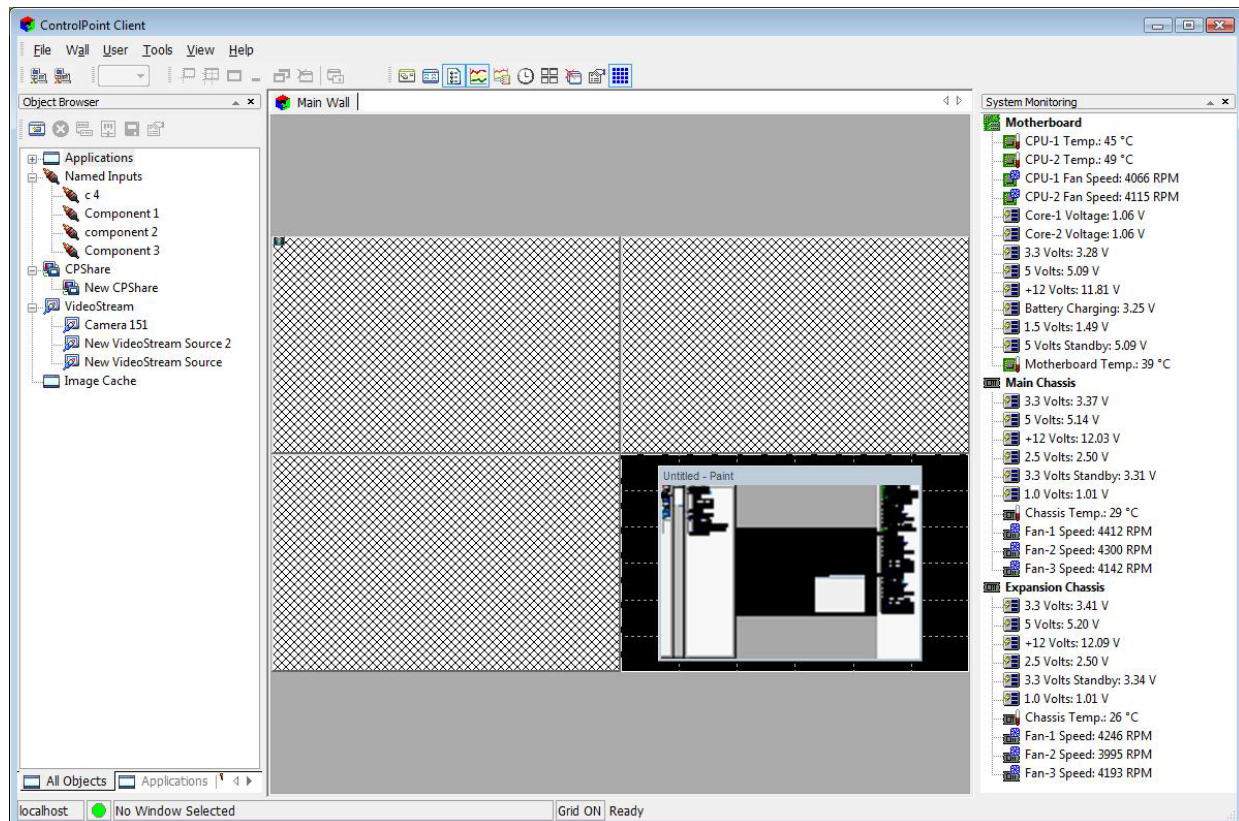


Figure 166 - System Monitoring

5—Client Menu and Tool Bar

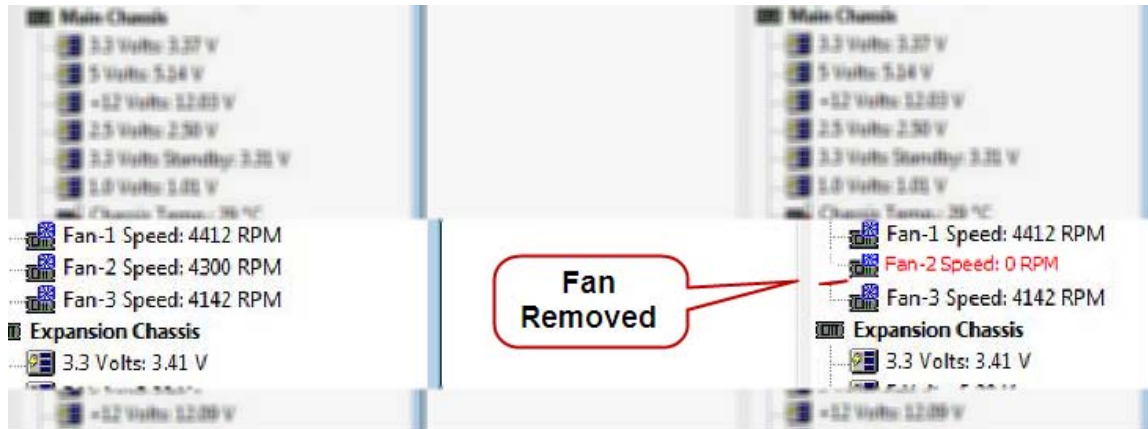


Figure 167 - System Monitoring Magnified (fan removed)

There are several ways to open the **Event Log—View** menu, **Tool Bar** button, and **System Health** context menu. By default, the event log will open docked in the ControlPoint window as shown in [Figure 168](#).

View Menu

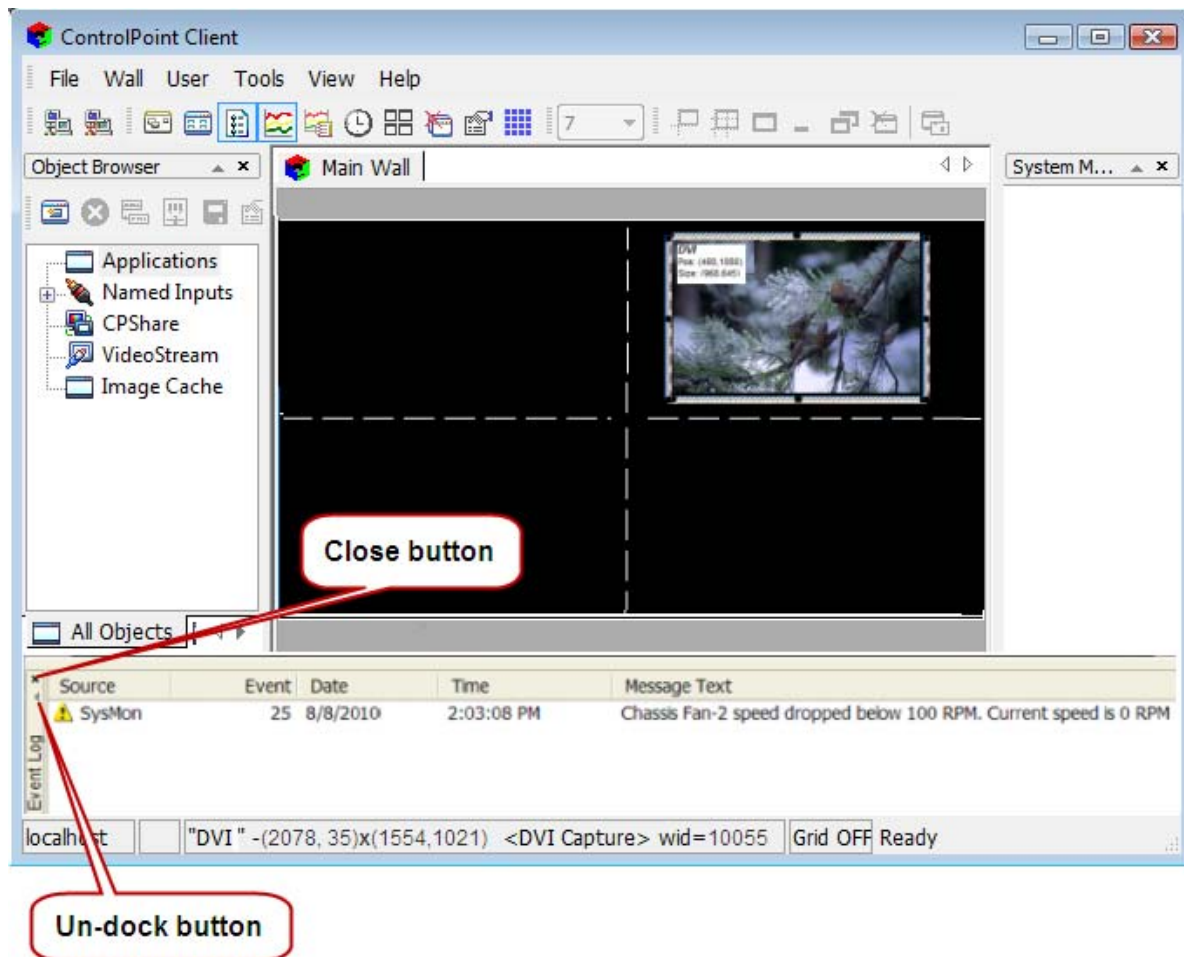


Figure 168 - Event Log Docked

The un-docked Event Log appears as a separate complete window, shown below.

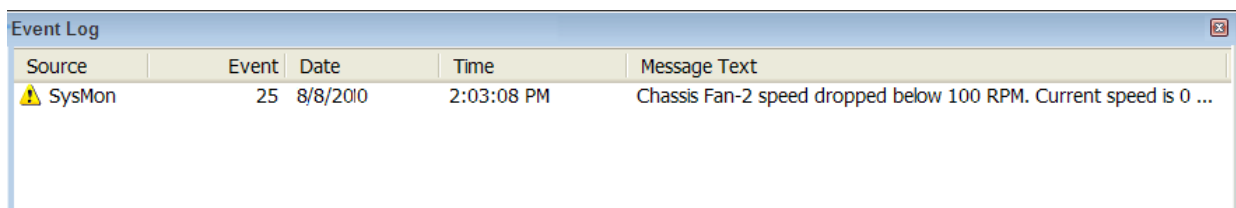


Figure 169 - Event Log Un-Docked

5—Client Menu and Tool Bar

Event logging has the following behavior:

- The Event Log notification ([Figure 169](#)) only appears in the **Event Log** panel for the active session. When the Server or Client is stopped and/or restarted, the Event Log notification disappears. However, the Log entries are kept in ControlPoint-specific log files in the following location:

Computer-->Windows (C:)-->Windows-->System32-->winevt-->Logs

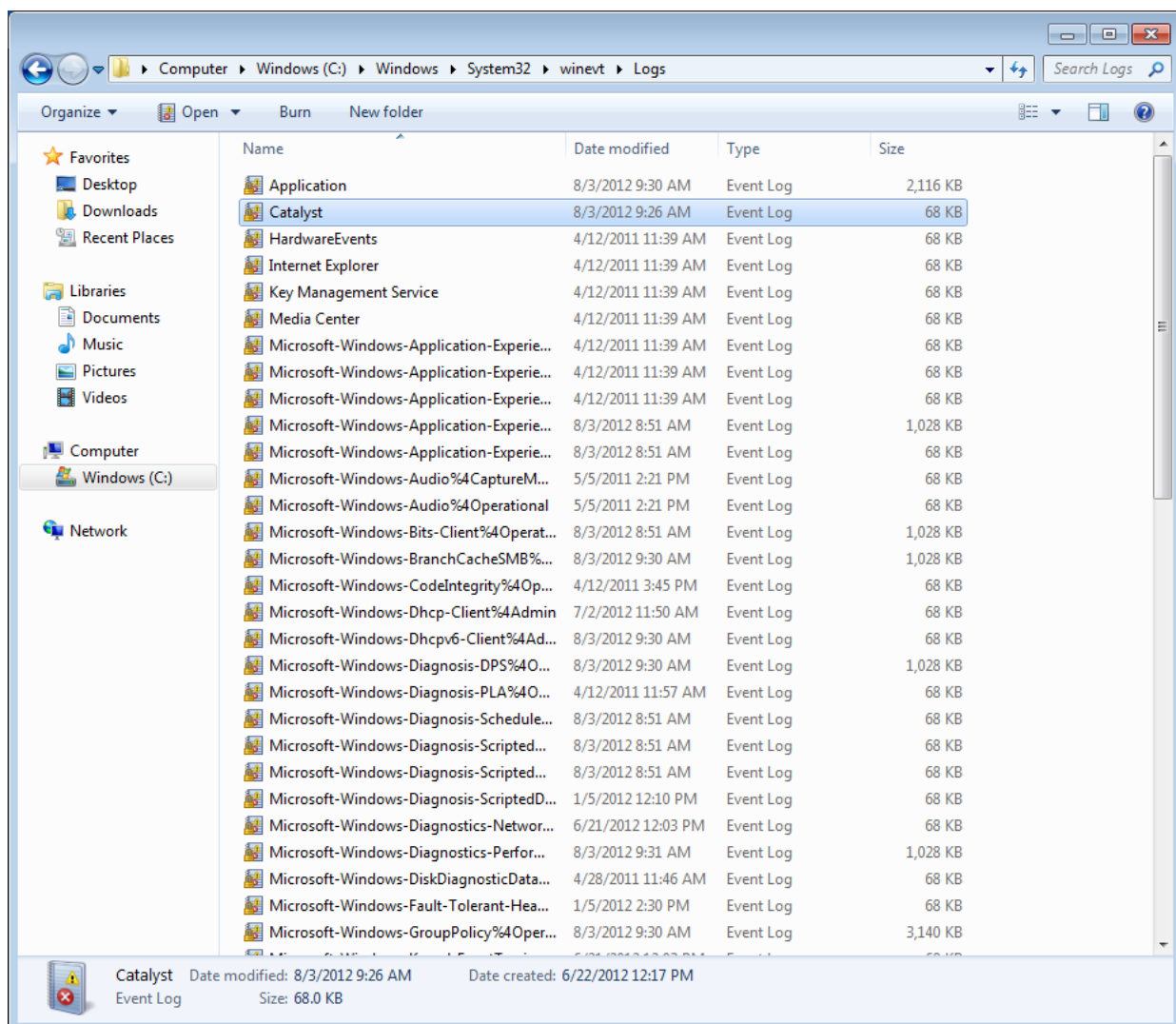


Figure 170 - Logs Directory

View Menu

- Double-click the Catalyst folder icon (**Figure 170**) to open the Windows **Event Viewer** dialog with the Catalyst log file and display all the entries:

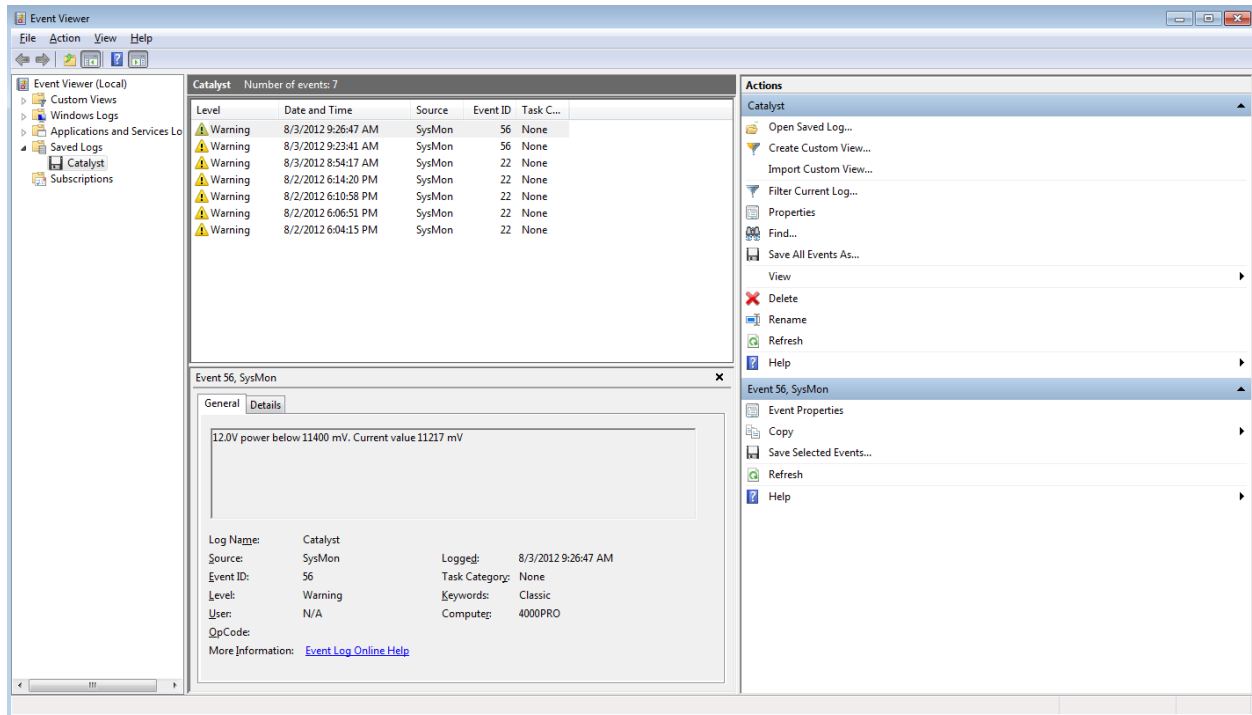


Figure 171 - Event Viewer

- Should a fan fail while the system is powered off, **System Monitoring** will report the CPU fan as failed when the system is brought back up. However, no entry will appear in the **Event Log** panel. Any error messages will be added to the Log File.
- When fans are removed from one or more chassis, the error is logged in the **Event Log** but the chassis are not specified. In such a case, use **System Monitoring** to find the chassis that is reporting the error.

5—Client Menu and Tool Bar

5.5.7 Status Bar

The following sections describe the features and use of the status bar.

5.5.7.1 Status Bar On

The **Status Bar** menu is shown open in the following figure. This is a checked item; both settings (checked and unchecked) are shown below. Also called out in the following figure are the status bar sub-items.

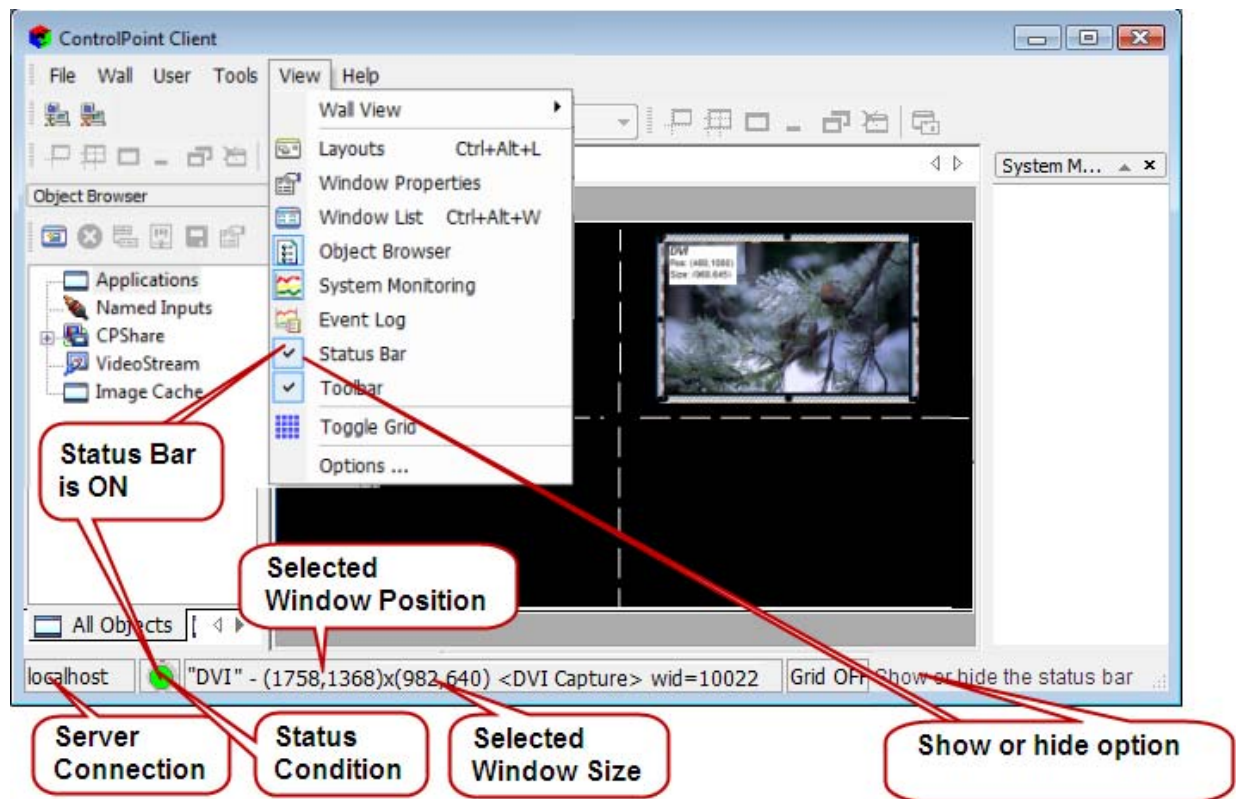


Figure 172 - Status Bar On

Note the bottom of the window and its contents. Putting the cursor over a menu item tells you what that item does in the Status Bar. The currently connected host is shown in the indent at the left end of the Status Bar.

View Menu

5.5.7.2 Status Bar Normal

The following figure shows a normal system status. This is seen as a non-blinking green light on the status bar.

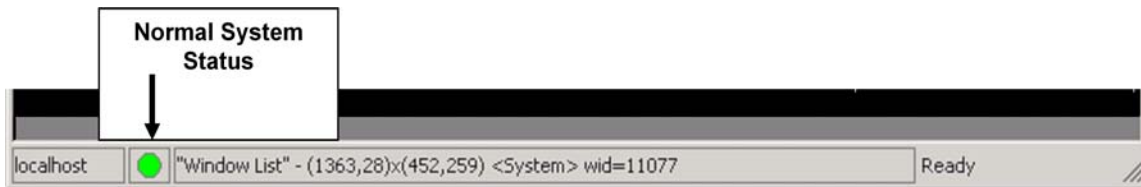


Figure 173 - Status Bar Normal

5.5.7.3 Status Bar Warning

When there is a change in the system status from **System Monitoring**, you will see a blinking warning symbol in the status bar. This can be seen in the following figure.

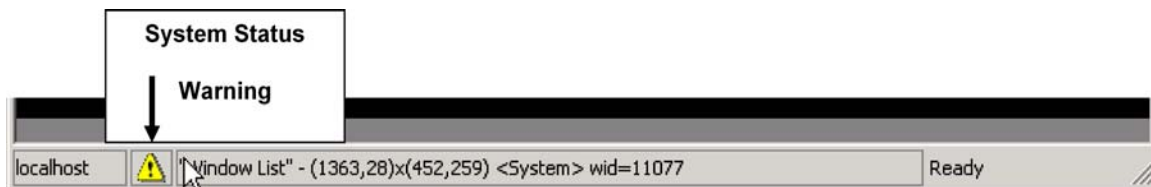


Figure 174 - Status Bar Warning

5—Client Menu and Tool Bar

5.5.7.4 Status Bar Context Menu

When you see a warning status on the Status Bar, you may double click the warning icon to clear it. You may also right-click the warning icon to pop up the menu, as is seen in the following figure. From this menu, you can open the Event Log to see the warning message, and/or open the System Monitoring window to view system status. See also previous sections on **System Monitor** and the **Event Log**. Choose **Acknowledge Events** to clear the warning symbol. If the actual event condition has not been corrected the blinking warning will change to a yellow light until the actual warned condition has been corrected.

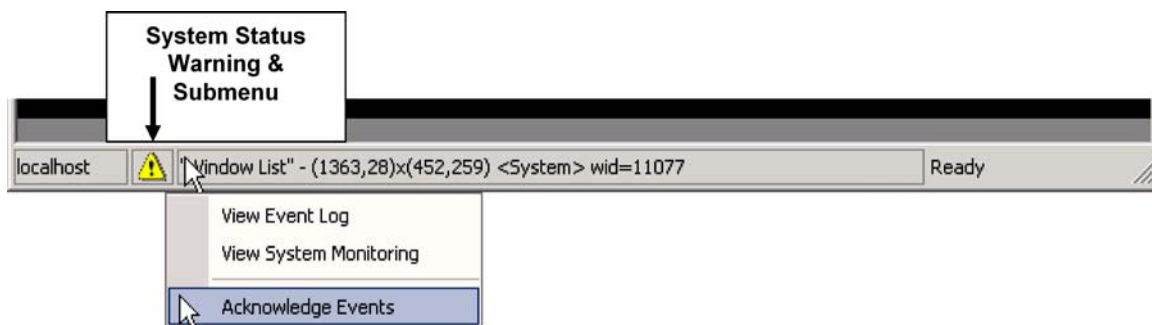


Figure 175 - Status Bar Submenu

View Menu

5.5.7.5 Status Bar Off

The following figure shows how to turn off the status bar (i.e. unchecked).

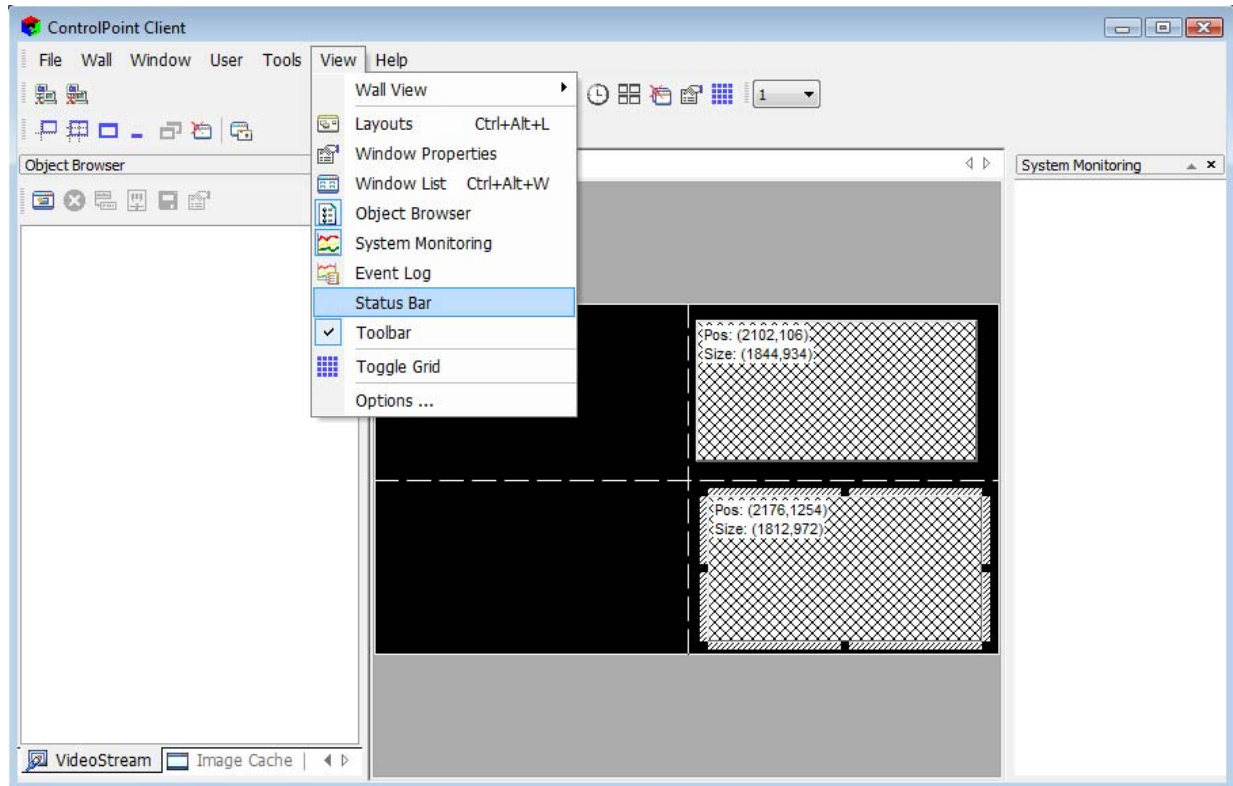


Figure 176 - Status Bar Unchecked

Note that there is **no** Status Bar in [Figure 176](#) and the **Status Bar** menu item is **not** checked.

5—Client Menu and Tool Bar

5.5.8 Tool Bar

The following sections describe the features and use of the tool bar.

5.5.8.1 Tool Bar On

The **Tool Bar** menu is shown open in the following figure. This is a checked item; both settings (checked and unchecked) are shown below.

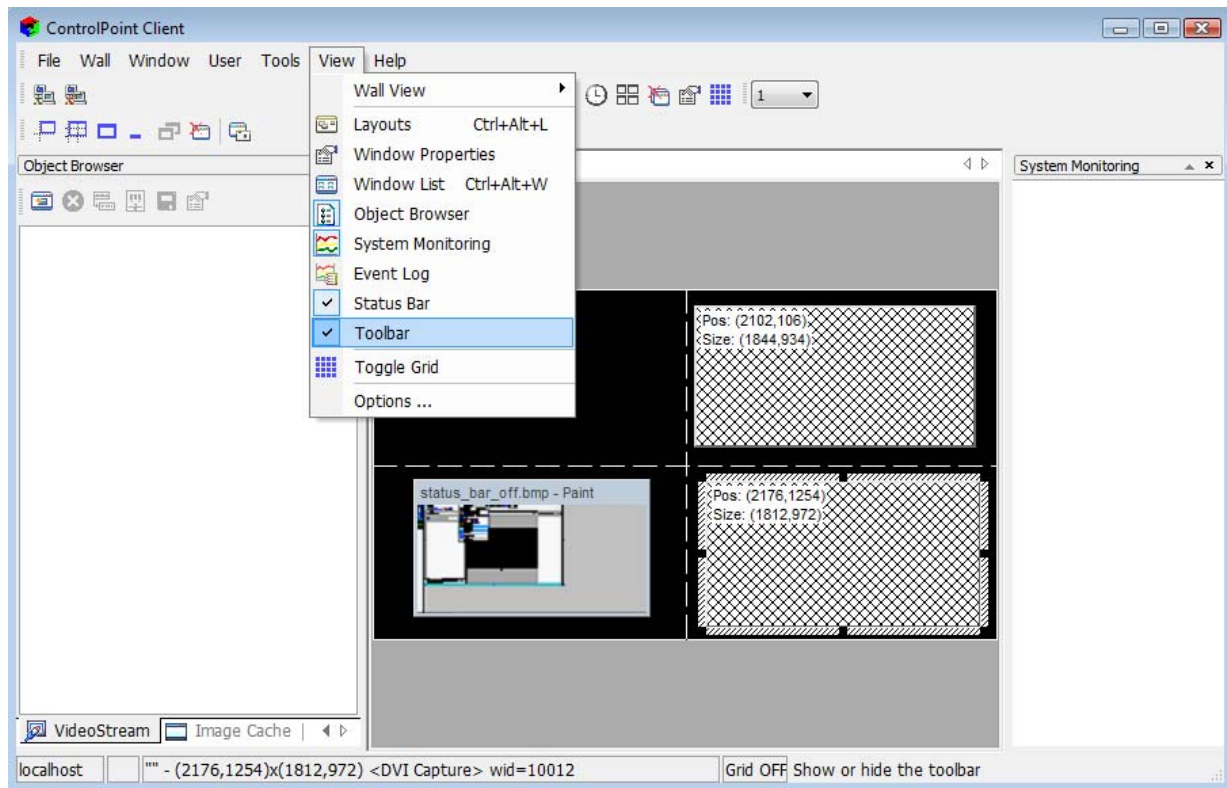


Figure 177 - Tool Bar On (Checked)

View Menu

5.5.8.2 Tool Bar Off

The following figure shows the **Tool Bar** menu off (unchecked).

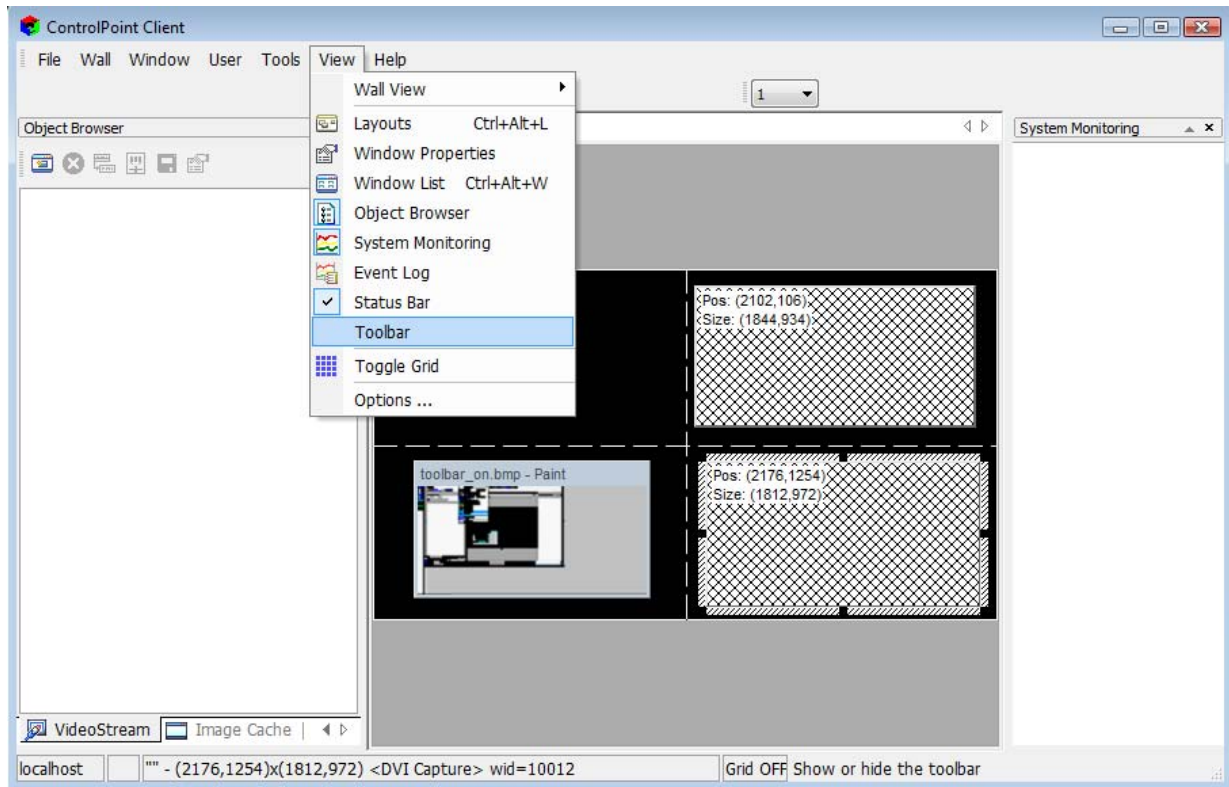


Figure 178 - Tool Bar Off (Unchecked)

5—Client Menu and Tool Bar

5.5.9 Options

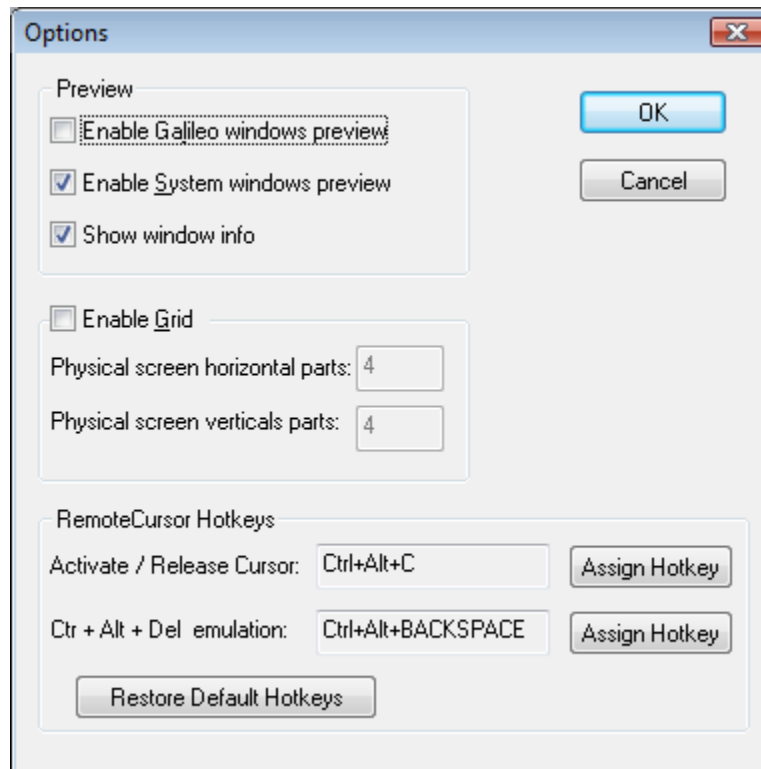


Figure 179 - Options

5.5.9.1 Preview

You can separately enable/disable Preview for Application/System windows. Disabling preview at the client side is helpful when CPClient is connected through a slow network or modem dial-up to limit data and speed up the connection. Preview settings can be globally controlled at the server side and applies to all clients connected to the server. If the server has disabled preview, CPClient will not receive preview images, regardless of the client-side settings.

Enable Galileo window preview enables/disables preview display for Galileo windows.

Enable System windows preview enables/disables preview display for application and system windows.

View Menu

Show windows info displays window information such as position and size as shown in the figure below. When the check box is not selected, the window will appear without any information.

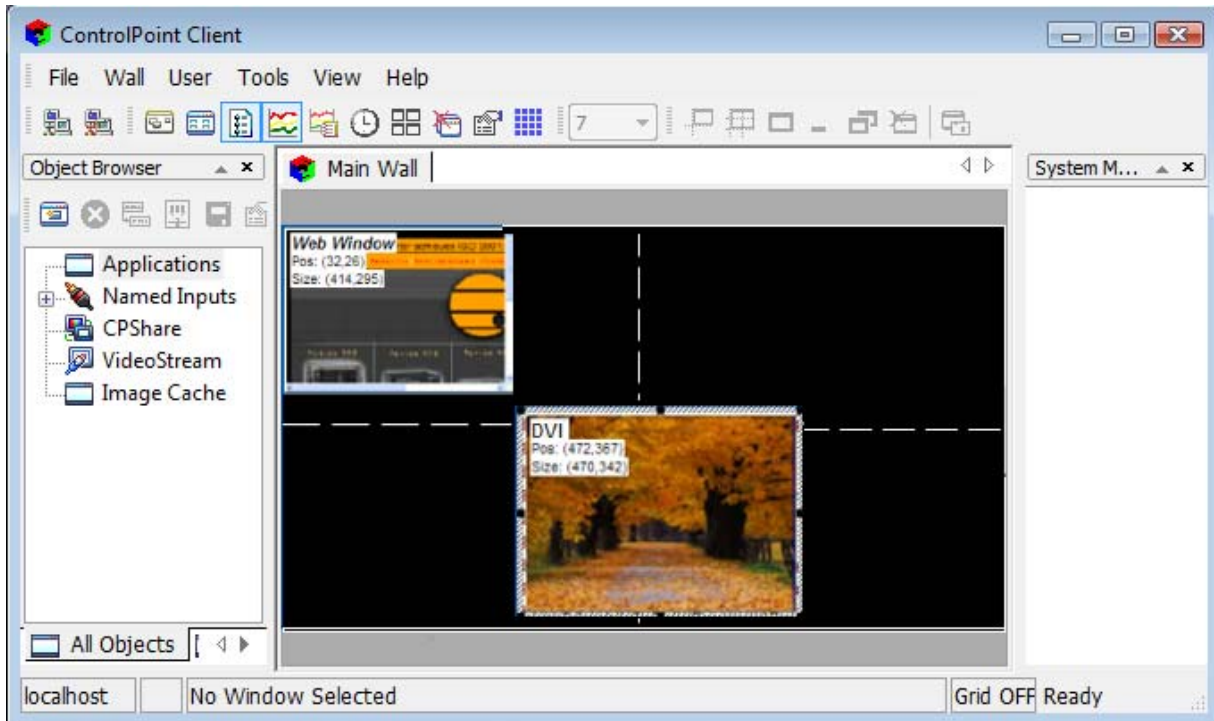


Figure 180 - Show window info

5.5.9.2 Grid

Enable Grid enables/disables the grid for the ControlPoint screen mimic. When the grid is enabled, window movement and resizing is aligned (Snapped) to the grid. The grid step is specified as horizontal and vertical parts of a single screen display wall. The actual number of parts on the grid can differ from the user specified values if the screen resolution cannot be exactly divided; the closest number of exact parts is automatically calculated.

5.5.9.3 Remote Cursor Hotkeys

Activate / Release Cursor contains the Hotkeys for activating and releasing the Remote Cursor.

Ctrl + Alt + Del Emulation contains the hotkeys for emulating the Ctrl + Alt + Del key strokes. This emulation is required because this key

5—Client Menu and Tool Bar

combination is handled by the local system and will not be transferred by RemoteCursor to the server.

Assign Hotkey for Activate / Release Cursor to assign the Hotkeys for activating and releasing the RemoteCursor.

Assign Hotkey for Ctrl + Alt + Del Emulation to assign the Hotkeys for emulating the Ctrl + Alt + Del key strokes.

Restore Default Hotkey to reset the Hotkeys for activating and releasing the RemoteCursor to Ctrl + Alt + C, and reset the Hotkeys for Ctrl + Alt + Del emulation to Ctrl + Alt + Back Space.

5.6 Tools Menu

5.6.1 Control VNC Host

Control VNC Host provides a means for the ControlPoint client to connect to a VNC server on a remote workstation. The primary use for Control VNC Host is to administer Streaming Video Systems. Because of the nature of VNC, this feature can be used to connect to any available system with a VNC Server installed. This feature should not be confused with CPShare which is used to display a workstation (VNC Server) on the display wall.

Select **Control VNC Host** under **Tools**, as shown in the figure below.

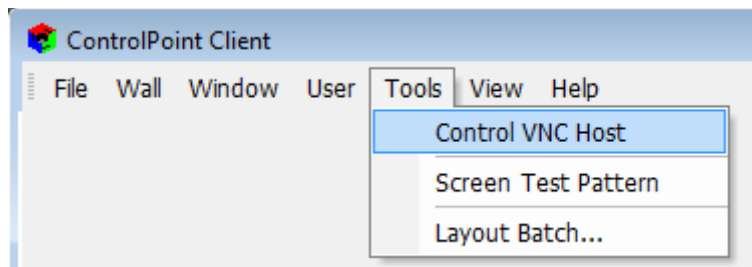


Figure 181 - Tools (Control VNC Host)

You will be prompted for the **Server** and **Password**, as shown in [Figure 182](#). Enter the IP address or the name of the remote server, and the password.

Tools Menu

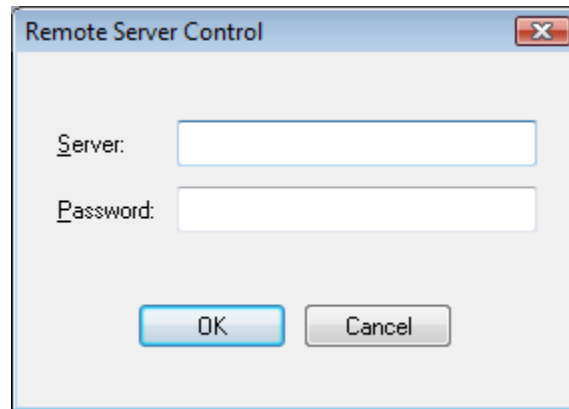


Figure 182 - Prompt for Server and Password

When you click OK the session control window will open on your workstation. You are now viewing and in control of the connected system.

5.6.2 Screen Test Pattern

The **Screen Test Pattern** feature gives you the ability to display a number of screen tests on the display wall. Select **Screen Test Pattern** under **Tools**, as shown in the figure below.

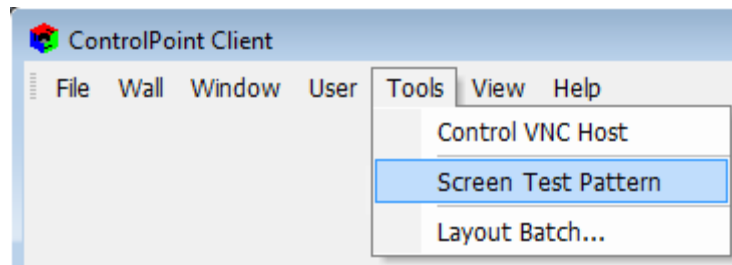


Figure 183 - Tools (Screen Test Pattern)

5—Client Menu and Tool Bar

If you select **Screen Test Pattern**, the **Screen Utilities** dialog will be displayed as shown in the figure below.

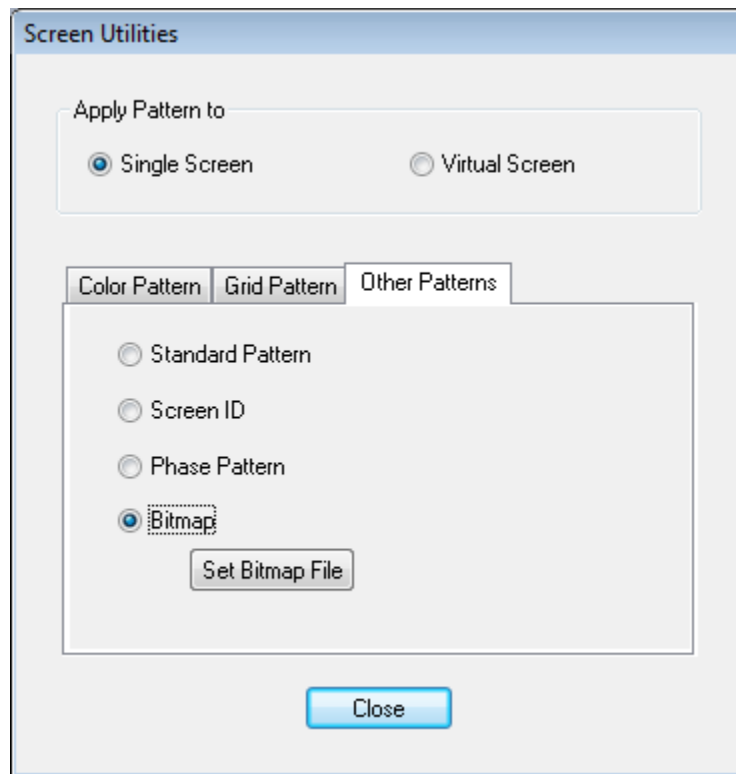


Figure 184 - Screen Utilities

Single Screen applies the test pattern to individual Displays in the wall.

Virtual Screen applies the test pattern to all displays in the display wall as a single image.

Tools Menu

5.6.2.1 Color Pattern

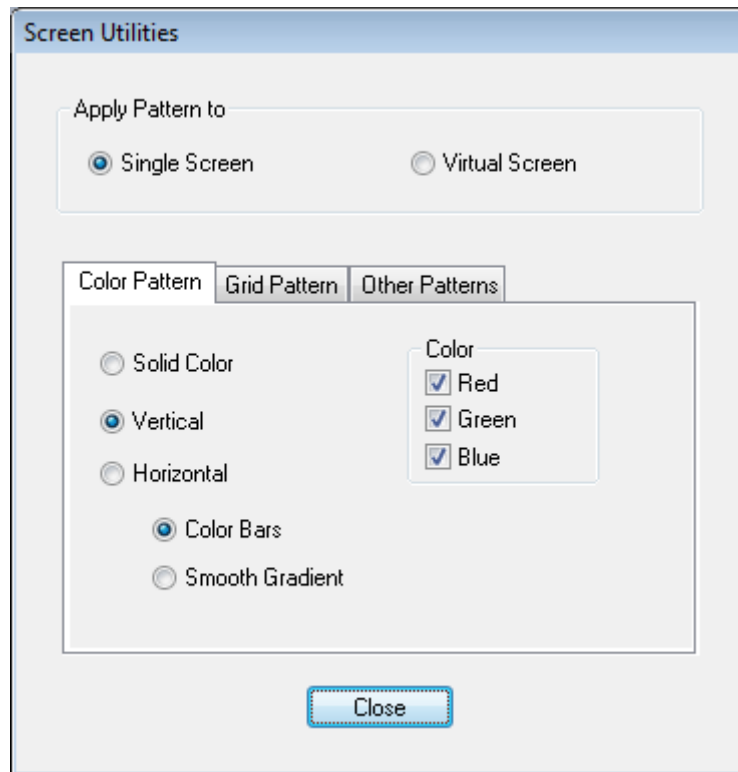


Figure 185 - Color Pattern

Solid Color shows only one color on the screen. The color is a combination of Red, Green, and Blue as selected.

Vertical displays 11 vertical color bars if **Color Bars** is selected. Color Bars is a display of the standard color bar test pattern. If **Smooth Gradient** is selected, a color gradient from 0 to 255 is displayed across each display (Single Screen selected).

Horizontal displays 11 vertical color bars if **Color Bars** is selected. Color Bars is a display of the standard color bar test pattern. If **Smooth Gradient** is selected, a color gradient from 0 to 255 is displayed across each display (Single Screen selected).

Color Bars displays 11 vertical or horizontal color bars. Color Bars is a display of the standard color bar test pattern.

Smooth Gradient displays a color gradient from 0 to 255 color units.

Colors a combination of Red, Green and Blue.

5—Client Menu and Tool Bar

5.6.2.2 Grid Pattern

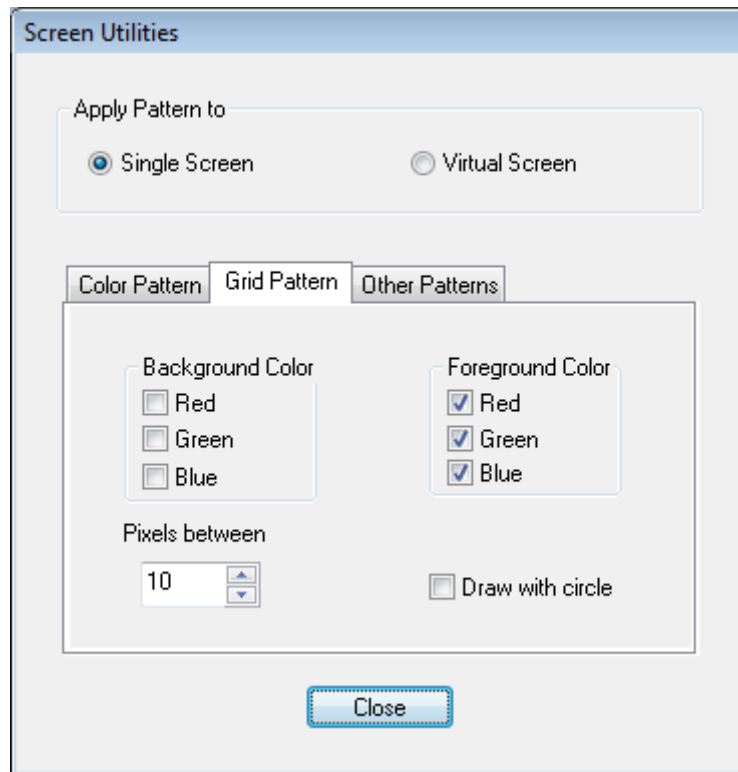


Figure 186 - Grid Pattern

Background Color a combination of Red, Green and Blue.

Foreground Color a combination of Red, Green and Blue.

Space between lines sets the space between the lines displayed in the grid lines on the wall.

Draw with circle displays the grids with circles. This feature makes it easy to find the edges when using the grid to align your displays.

Tools Menu

5.6.2.3 Other Patterns

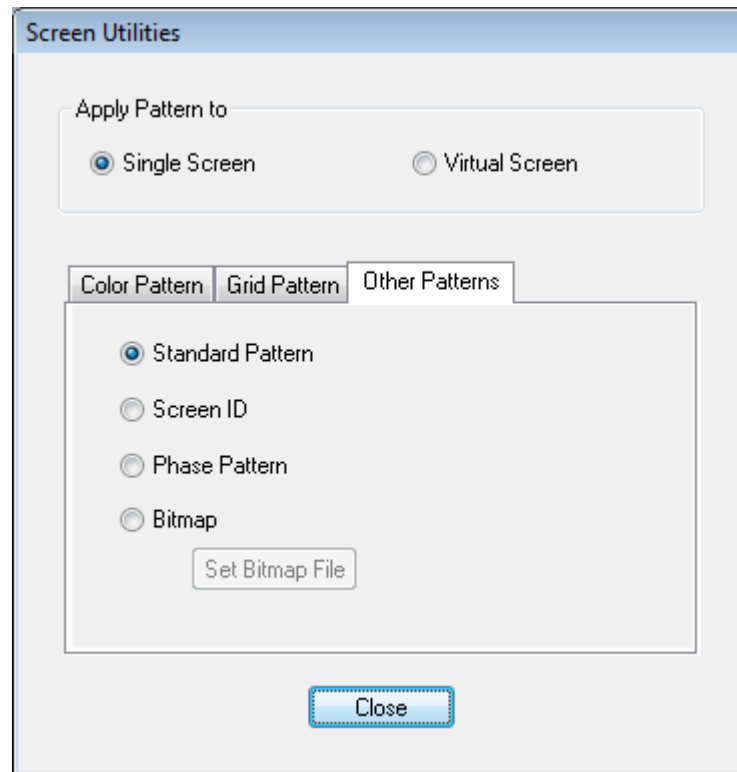


Figure 187 - Other Patterns

Standard Pattern displays the standard color pattern.

Screen ID displays a large white circle with the number of the driver in it. This identifies the screen with its output. This feature is very useful for determining that your controller to display cabling is correct.

Phase Pattern displays the phase pattern. Each line is separated by 1 pixel. Or, every other pixel is on/off.

Bitmap displays a bitmap.

Set Bitmap File lets the user select an image to display as the bitmap. The image formats can be BMP, GIF, JPEG, PNG, TIFF, and EMF.

5—Client Menu and Tool Bar

5.6.3 Layout Batch

Layout Batch allows you to add, remove, save, load, and run layouts.

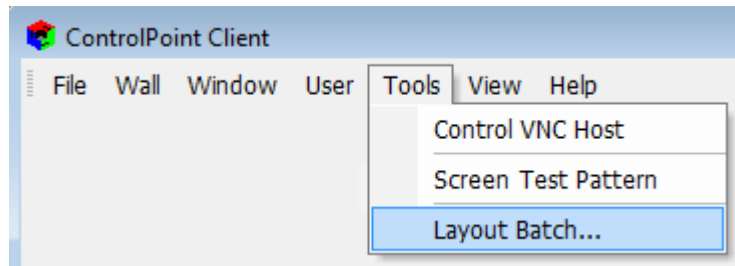


Figure 188 - Tools Menu—Layout Batch

Open the **Tools** menu and select **Layout Batch**. The **Layout Batch** dialog opens.

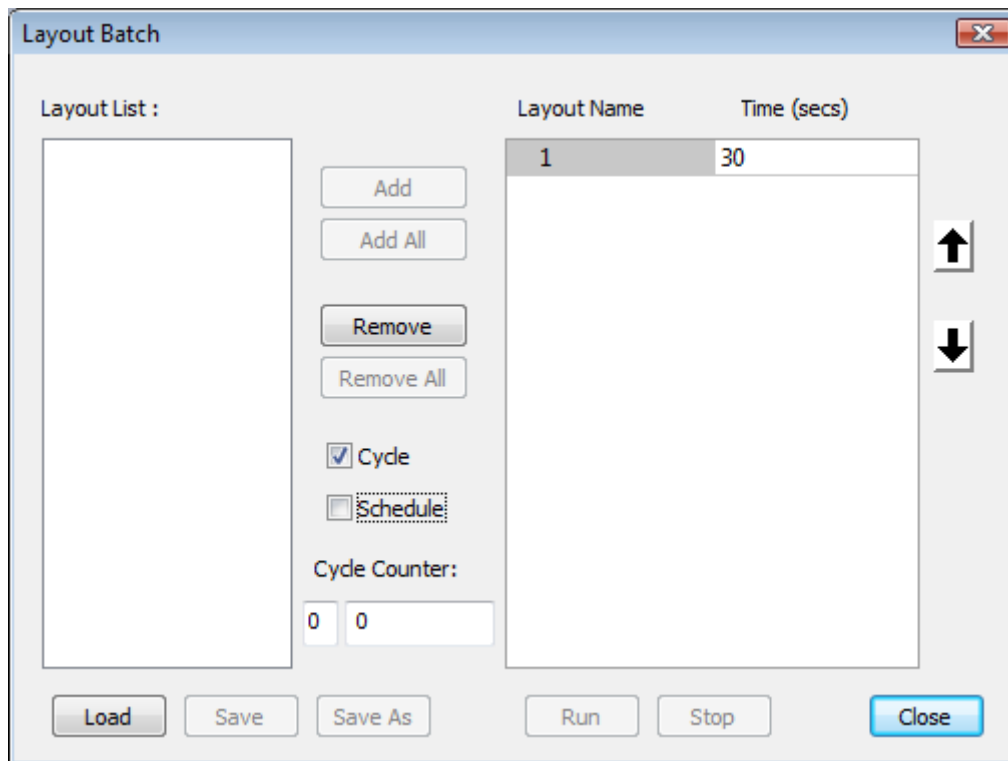


Figure 189 - Layout Batch Dialog

The left side of the dialog has the **Layout List** which lists all of the layout files. The right side of the dialog has the Layout Batch list which lists all the layouts in the layout batch.

Tools Menu

To Select One Layout to the Batch

1. Select a layout on the **Layout List**.
2. Click the **Add** button. The selected layout will appear on the layout batch list with a default time interval of 10 seconds, after which it disappears from the **Layout List**.

To Select All Layouts to the Batch click the **Add All** button.

1. To Remove One Layout from the Batch.
2. Select a layout from the Layout Batch List.
3. Click the **Remove** button. The selected layout will be removed from the Layout Batch list and reappear in the **Layout List**.

To Remove All Layouts from the Batch, click the **Remove All** button.

To Arrange the Layout in a Specified Order

1. Select a layout in the batch list.
2. Click the **Up** or **Down** arrow buttons until the desired order is reached.

To Change the Time Interval for a Layout

1. Click on the **Time** column for that layout.
2. Specify a new time.

To Run the Layout Batch, click the **Run** button.

To Cycle the Layout Batch

1. Click the **Cycle** check box.
2. Click **Run**. All the layouts in the Layout Batch will be run on a continuous cycle. If schedule limits have been set, the run cycle will adhere to the set schedule.

To Schedule the Layout Batch

1. Click the **Schedule** check box.
2. Click the **Time** column corresponding to the **Layout Name**.

5—Client Menu and Tool Bar

3. Enter the desired time in 24-hour format (hh:mm:ss).
4. Click **Run** to run the Layout Batch.

To save the Layout Batch, click the **Save** button.

To load an Existing Layout Batch from the Disk, click the **Load** button.

5.7 Help and About

The **Help** menu is shown open in the figure below. Sub-menu items are described in following sections.

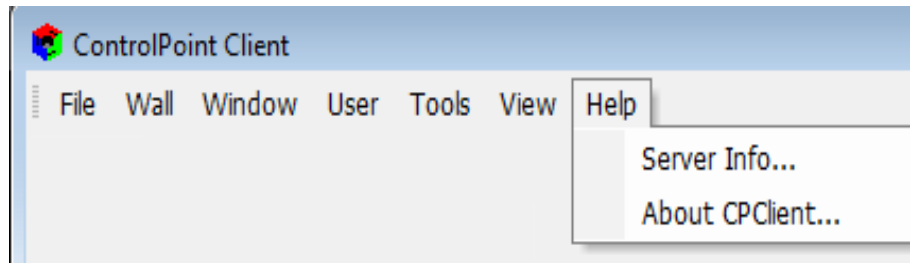


Figure 190 - Help

Help and About

5.7.1 Server Info

Server Info displays information about the server to which the user is connected, the hardware platform, the version of the ControlPoint software running on the server, and the configuration of VirtualScreen.

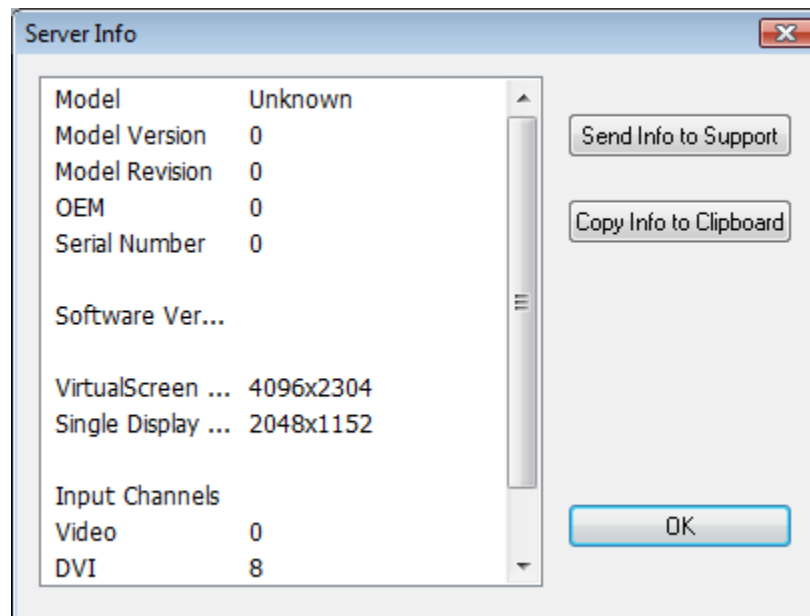
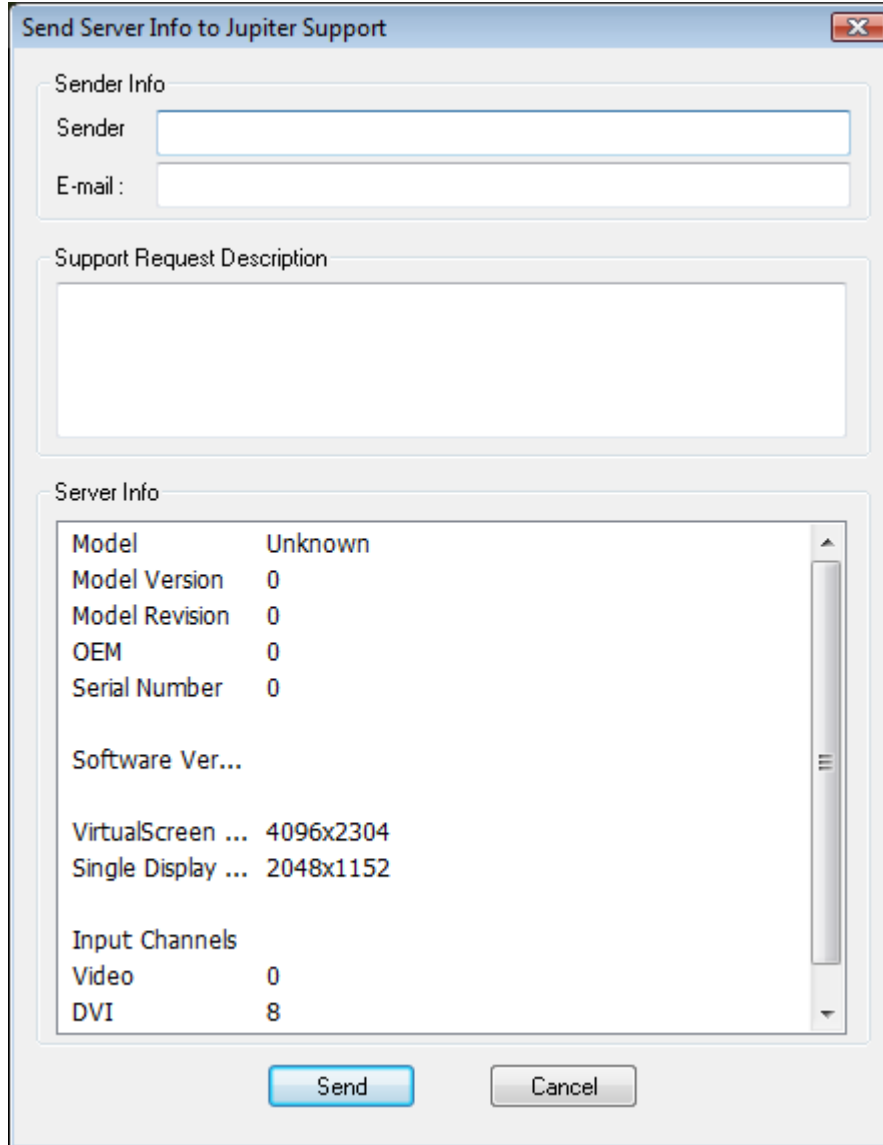


Figure 191 - Server Info

Send Info to Support sends the server information to Jupiter's **Technical Support** to help with trouble shooting. Pressing this button will open the **Send Server Info to Jupiter Support** dialog as shown in the following page.

Copy Info to Clipboard copies the server information to the Windows clipboard, so that you can easily paste it into an E-mail, a file, etc.

5—Client Menu and Tool Bar



The dialog box titled "Send Server Info to Jupiter Support" contains three main sections. The "Sender Info" section has two text input fields: "Sender" and "E-mail :". The "Support Request Description" section is a large text area. The "Server Info" section displays a list of system details, including Model (Unknown), Model Version (0), Model Revision (0), OEM (0), Serial Number (0), Software Ver..., VirtualScreen ... (4096x2304), Single Display ... (2048x1152), Input Channels, Video (0), and DVI (8). At the bottom are "Send" and "Cancel" buttons.

Server Info	
Model	Unknown
Model Version	0
Model Revision	0
OEM	0
Serial Number	0
Software Ver...	
VirtualScreen ...	4096x2304
Single Display ...	2048x1152
Input Channels	
Video	0
DVI	8

Figure 192 - Send Server Info

Sender - Enter your name here.

E-mail – Enter your E-mail address so that the technical support staff can contact you for further information.

Support Request Description – Enter the reasons for support here, including problem descriptions, steps to reproduce the problems, etc.

Tool Bar

Send sends an E-mail to the Jupiter's technical support, including the information you entered and the server information.

5.7.2 About

This displays the Version number and Build number for the ControlPoint Remote Client.

5.8 Tool Bar

The tool bar context menu provides displaying-several tool bars in the ControlPoint client, as shown in the figure below.

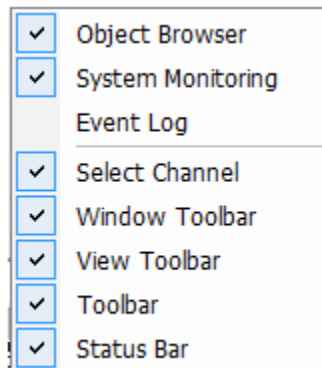


Figure 193 - Tool Bar Context Menu

Select Channel

The Select Channel tool bar, with a drop-down menu, allows quick access to change channels in Video and DVI Capture windows. See icon descriptions below.

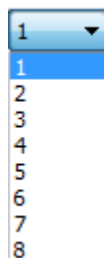


Figure 194 - Change Channel Tool Bar

5—Client Menu and Tool Bar

Window Tool Bar

The Window Tool Bar allows you to control the view of the selected window. This tool bar is context sensitive and will change by the type of windows that is selected. For instance, you cannot maximize a Video window. See icon descriptions below.



Figure 195 - Window Tool Bar

Tool Bar (Connect)

The **Tool Bar** menu main tool bar or connect tool bar allows you to connect to or disconnect from ControlPoint servers. You will also find these functions in the **File** menu. This tool bar must be open to view the other tool bars. See icon descriptions below.



Figure 196 - Tool Bar

The View Tool Bar opens (to view) several control windows. See icon descriptions below.



Figure 197 - View Tool Bar

Tool Bar Icon Definitions

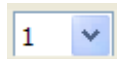
5.9 Tool Bar Icon Definitions



Connect to server



Disconnect from server



Select a channel for a DVI window or a Video window.



Enlarge the selected window to the size of **a screen**, the one that the top-left corner of the selected window is on.



Enlarge – the selected window to the size of **multiple screens**, the ones that overlap the selected window.



Maximize – the selected window.



Minimize the selected window.



Restore the position and size of the selected window after being maximized or minimized.



Delete the selected window.

5—Client Menu and Tool Bar



Invoke the Position and Size setup dialog.



Invoke the Property setup dialog.



Show/Hide the Layouts dialog



Show/Hide the Window List



Show/Hide the Object Browser



Show/Hide the System Monitor window



Show/Hide the Event Log window



Show/Hide the Event Scheduler window



Toggle **Grid** on/off.

Chapter 6—System Restore

6. System Restore

6.1 Restoring the Fusion Catalyst Display Wall Processor

System restore returns the Fusion Catalyst back to the factory installation settings, including ControlPoint Software and the Windows OS. A system restore will wipe out every procedure that was performed or stored on the system since its factory installation.

A system restore will format the disk drives and wipe out every application or data stored on the system. Before launching the System Restore, ensure that the following conditions and prerequisites are met:

- From VSConfig, note the wall configuration and any non-default settings in SD Video or Advanced. If the system includes a SVS-8, note all information in the SVSConfig table.
- Back up all important data, such as layouts, images, objects, and other pertinent information. ControlPoint layouts and objects are in C:\Program Data\ControlPoint\Server Data Files.
- The only hard drives installed on the system during the restore must be those to receive the factory image, either a single device in HD0 or the appropriate drives for a RAID array. Remove all other hard drives (e.g. backup or RAID hot spares).
- After restore, the wall configuration will be a single output at 1024x768 resolution.
- Have the correctly labeled USB Flash Drive (UFD) for the system to be restored.

6—System Restore

6.2 Procedure

Follow the procedure below to restore your Fusion Catalyst system.

1. Insert the UFD labeled **RESTORE**.
2. Reset the system. You must ensure that the first boot device is USB Sandisk. If necessary, hit the **Delete** key during boot-up to enter the BIOS to change the boot order.
3. Windows PE will start and then launch a Command Prompt window. In the Command Prompt window, type **diskpart**, and then press **Enter**. Perform the following tasks to locate the volume of the UFD:
 - a. Type **list volume**, and then press **Enter**.
 - b. From the list of volumes, identify and note the letter of the UFD. It is important that you identify the correct volume, make sure that **RESTORE** is the name for the volume. If the volume of the UFD is not seen, remove the UFD and re-insert it (this is often necessary on a Fusion Catalyst 4000).
 - c. Type **exit**, and press **Enter**, to exit the Diskpart utility.
4. Type volumeletter: where volumeletter is the volume of the UFD (e.g. E:), and then press **Enter**.
5. Type **apply.bat.image.wim**, where "image" is the "Model of the Controller—4 digit serial number", e.g. **1000PRO—1234.wim**.
6. A progress bar will be presented and a chkdsk performed (ignore the error about the log). Wait until a command prompt is given, then type **exit** and press **Enter**. Remove the UFD as the system restarts.
7. After Windows 7 restarts, run VSConfig to restore the wall configuration and any non-factory defaults.

Chapter 7—Configuring ControlPoint Software

7. Configuring ControlPoint Software

Note	It is recommended that you have a standard multi-sync monitor (or flat panel) available for configuring your Wall Controller for the first time. Your Wall Controller has been configured at the factory for a single display and a resolution of 1024X768 at a 60 Hz refresh rate.
-------------	---

Your Display wall can be configured with the VSConfig utility in a few basic steps. These steps will be covered in detail in the following sections.

1. Configure the Display Devices (projectors, cubes, monitors, flat panels); resolution, color depth, and frequency.
2. Configure the wall itself—the number of rows and the number of displays in each row.

Cautions	<ol style="list-style-type: none">1. User Account Control (UAC) needs to be disabled to run VSConfig.2. Close ALL windows before making any changes to items in VSConfig.3. You must restart your Fusion Wall Controller system TWICE whenever any changes are applied to the VSConfig.4. The Settings page within Display Settings will show the Virtual Screen as Display 1. The graphics port on the motherboard is shown as Display 2. The primary display for the system must be Display 1. Do not enable Display 2.
-----------------	---

7—Configuring ControlPoint Software

7.1 VSConfig

1. Run **VSConfig**, after Windows restarts.
 - a. Go to **Start Menu—>Programs—>Jupiter—>ControlPoint—>VSConfig**

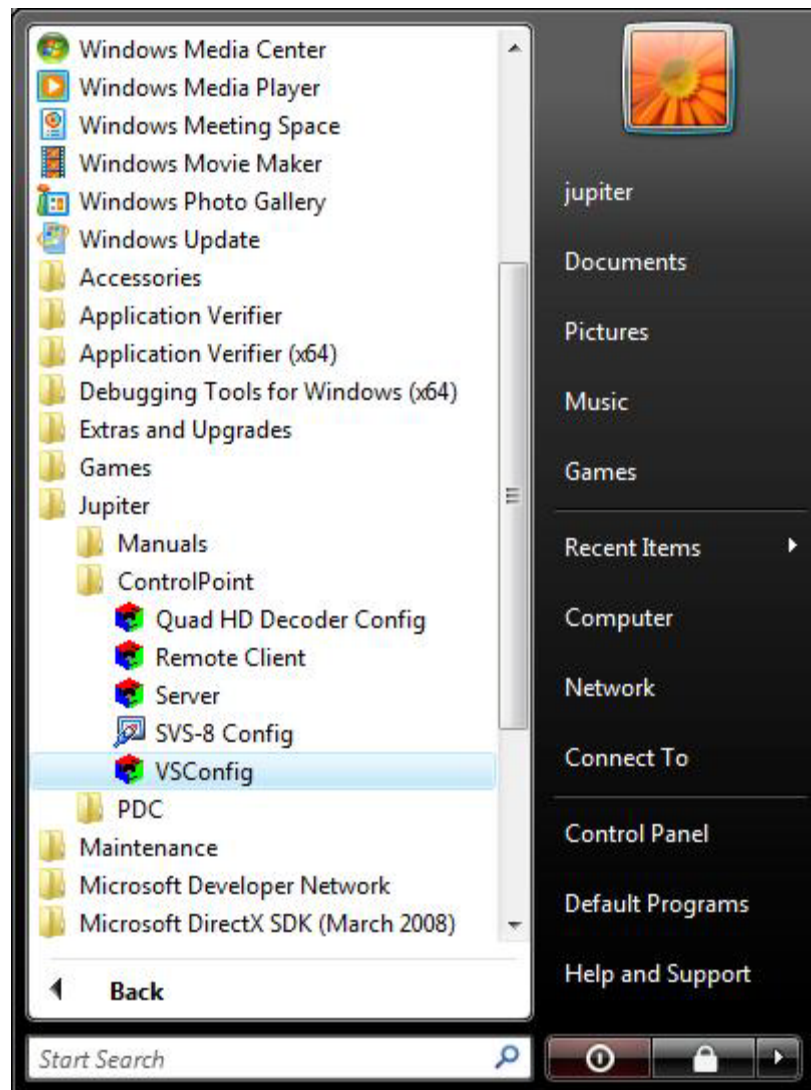


Figure 198 - VSConfig Program

- b. Set the wall dimension (e.g. 2x2 wall, set Screens Horizontally and Screens Vertically fields to 2).
 - c. Set the desired single screen resolution. In the following example, it is: 1400 x 1050 x 32

VSConfig

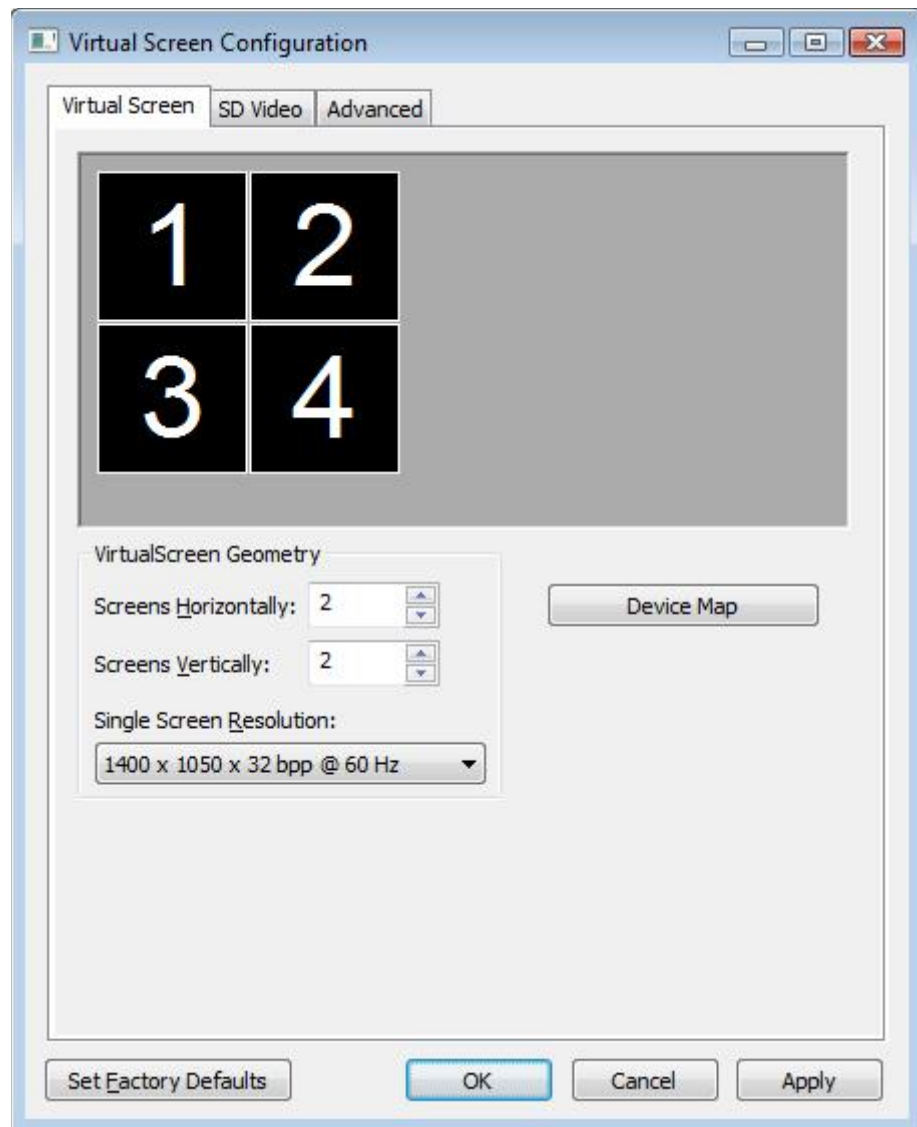


Figure 199 - Virtual Screen Configuration

- d. Click **OK**. When prompted for restarting Windows, click **Yes**.
- e. After Windows is restarted, it is necessary to restart Windows a second time.
- f. If the wall layout is reconfigured, the **Single Screen Resolution** will go blank. In such cases, set the resolution and restart the system.

7—Configuring ControlPoint Software

Note VSconfig MUST be executed in display **1**, moving it off of display **1** makes it harder for the user to find the **OK** button to restart.

For setting Custom Screen Resolutions, refer to [“Custom Modes”](#).

7.1.1 Custom Modes

If the Custom Modes option is not needed for your configuration, proceed to [“Factory Defaults” on page 231](#). Custom Modes can be chosen in the Single Screen Resolution drop-down menu as shown in the following figure:

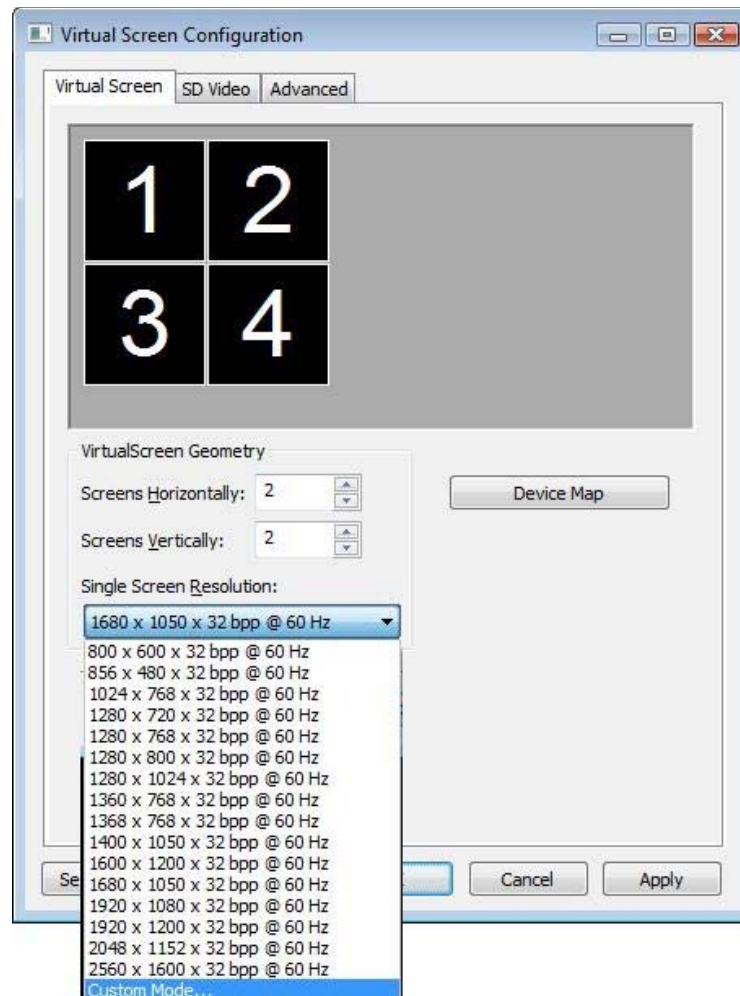


Figure 200 - Custom Modes

VSConfig

When **Custom Mode** is chosen as the resolution, the **Custom Display Mode Configuration** dialog appears. This dialog allows the creation of custom display resolutions that are not part of the standard resolution options.

The first time Custom Display Mode runs, an empty Display Custom Modes list appears as shown in the figure below:

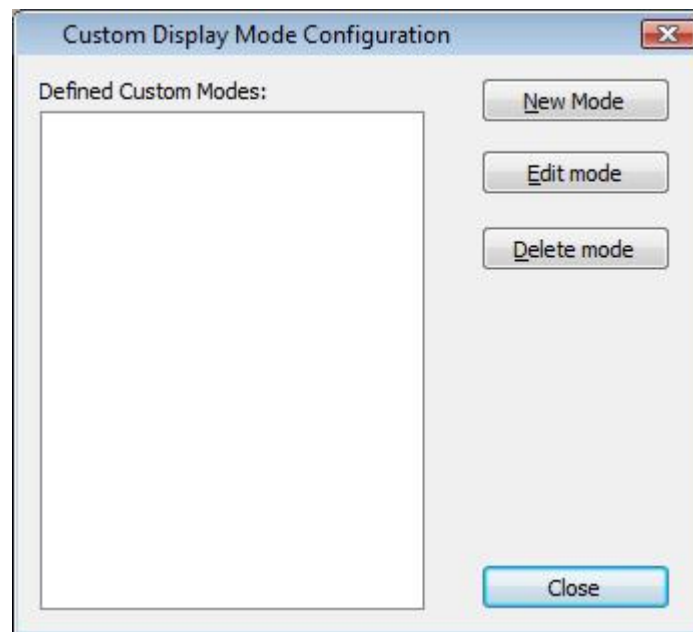


Figure 201 - Custom Display Mode Configuration Dialog

1. Click the **New Mode** button to bring up the entry dialog shown below.
2. Enter the **Width** and **Height** values in pixels. Refer to the resolution required by your display device.

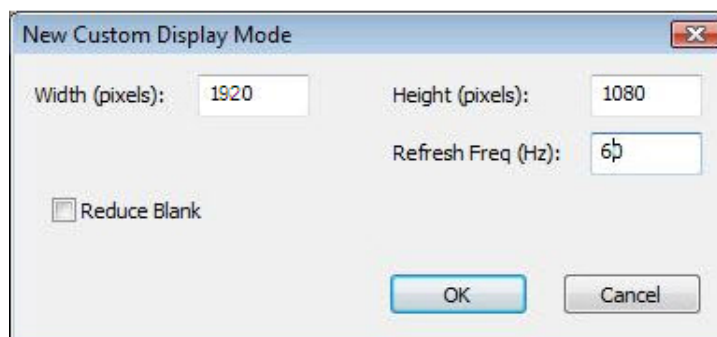
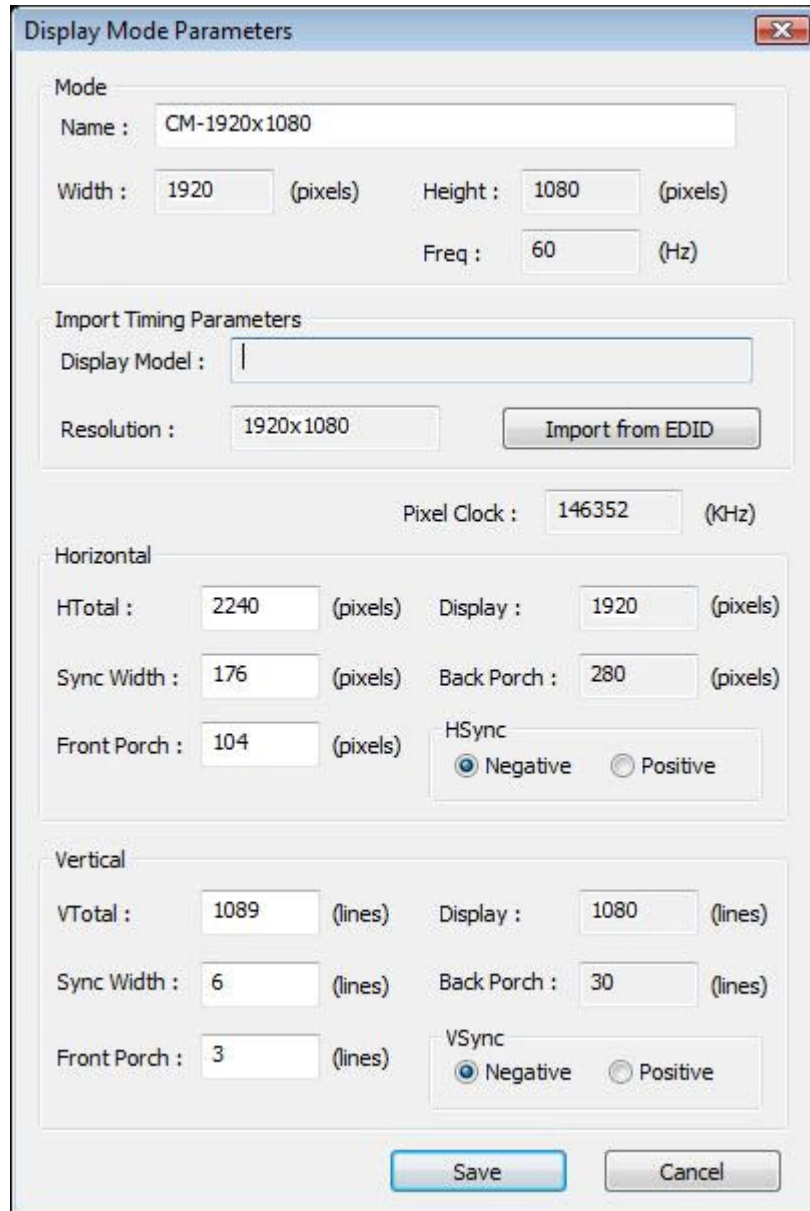


Figure 202 - New Mode

7—Configuring ControlPoint Software

3. Enter the refresh frequency (Hz) required by the display device in the Freq. field.
4. Select the **Reduce Blank** option to reduce blanking around the images.
5. Click the **OK** button. When the basic information is entered, clicking **OK** opens the **Display Mode Parameters** dialog.



Display Mode Parameters

Mode

Name : CM-1920x1080

Width : 1920 (pixels) Height : 1080 (pixels)

Freq : 60 (Hz)

Import Timing Parameters

Display Model :

Resolution : 1920x1080 Import from EDID

Pixel Clock : 146352 (KHz)

Horizontal

HTotal : 2240 (pixels) Display : 1920 (pixels)

Sync Width : 176 (pixels) Back Porch : 280 (pixels)

Front Porch : 104 (pixels) HSync

☒ Negative ☐ Positive

Vertical

VTotat : 1089 (lines) Display : 1080 (lines)

Sync Width : 6 (lines) Back Porch : 30 (lines)

Front Porch : 3 (lines) VSync

☒ Negative ☐ Positive

Save Cancel

Figure 203 - Display Mode Parameters

VSConfig

The default name of this custom mode is given as Width x Height x Frequency. The default name can be modified to a more descriptive name if desired.

Note	Horizontal entries in Custom Modes must be divisible by eight.
-------------	--

If the Custom Modes option is not needed for your configuration, proceed to **"Factory Defaults" on page 231**.

6. Click **Save** to save the Custom Mode. When saved, the mode name will appear in the **Single Screen Resolution** list followed by an asterisk.

The following confirmation dialog will appear.

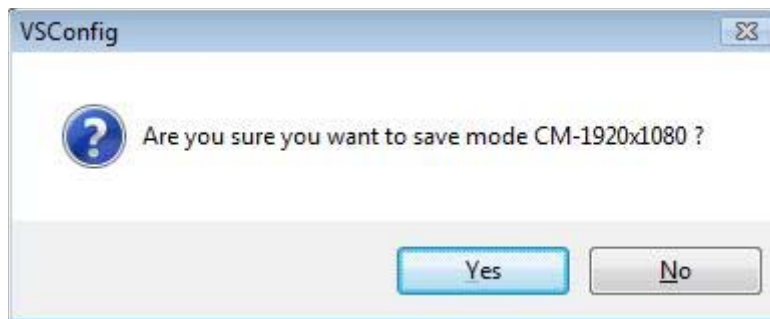


Figure 204 - VSConfig Confirmation Dialog

7—Configuring ControlPoint Software

7. Click **Yes** to save the Custom Mode.

When the new resolution is saved, it will appear in the Defined Custom Modes list as shown below:

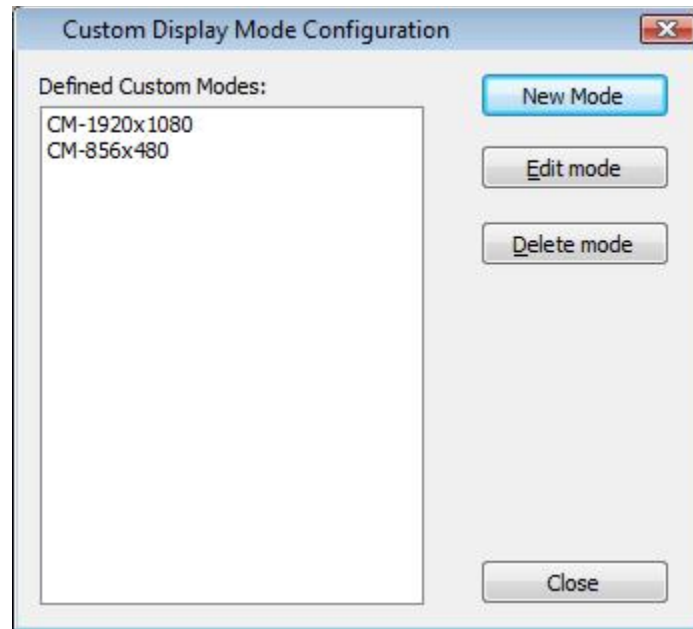


Figure 205 - Defined Custom Modes List

VSConfig

7.1.1.1 Import Timing Parameters

The Import Timing Parameters section imports the timing parameters of a Display EDID table. The selected model name and resolution settings will display on the Display Model and Resolution fields.

Import From EDID

After an output mode has been selected, click the **Import From EDID** button to populate the Display Mode Parameters dialog fields from the selected Display Model.

The following dialog appears:

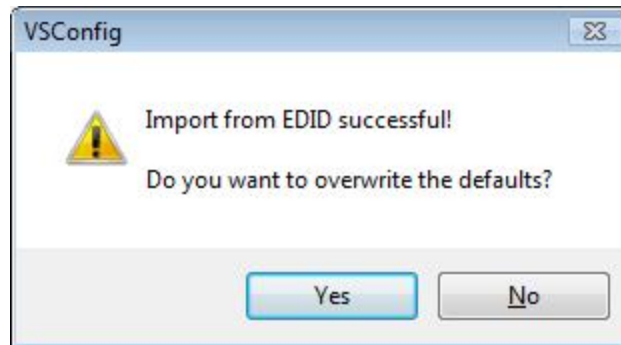
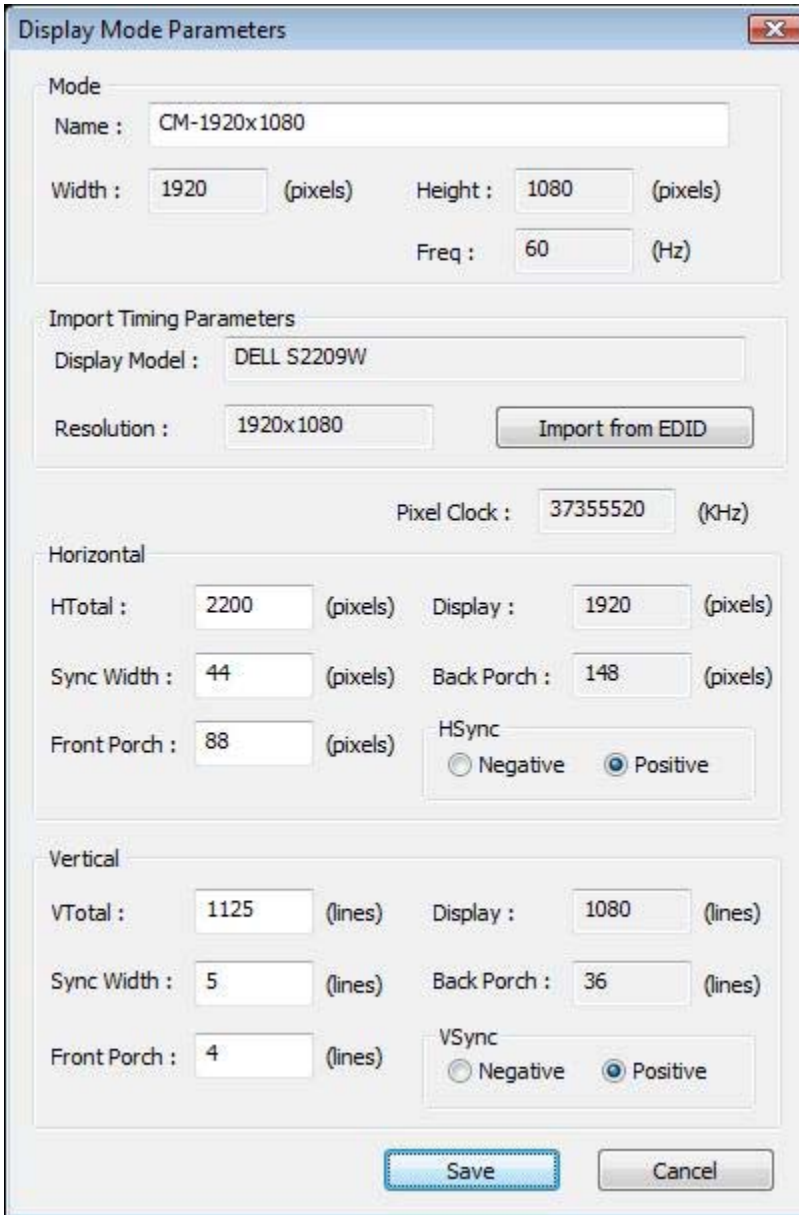


Figure 206 - Import from EDID Dialog

- Choose **No**, to keep the default values.
- Choose **Yes**, to keep the EDID values.

7—Configuring ControlPoint Software

The Display Mode Parameters dialog appears with the imported EDID values as shown below:



Display Mode Parameters

Mode
Name : CM-1920x1080

Width : 1920 (pixels) Height : 1080 (pixels)
Freq : 60 (Hz)

Import Timing Parameters
Display Model : DELL S2209W
Resolution : 1920x1080 Import from EDID

Pixel Clock : 37355520 (KHz)

Horizontal
HTotal : 2200 (pixels) Display : 1920 (pixels)
Sync Width : 44 (pixels) Back Porch : 148 (pixels)
Front Porch : 88 (pixels) HSync
☐ Negative ☒ Positive

Vertical
VTotal : 1125 (lines) Display : 1080 (lines)
Sync Width : 5 (lines) Back Porch : 36 (lines)
Front Porch : 4 (lines) VSync
☐ Negative ☒ Positive

Save Cancel

Figure 207 - Display Timing—Import from EDID

Note Items on the right of the Display Mode Parameters dialog are grayed out (read-only) because they are derived from either the new entries or the imported EDID settings.

VSConfig

7.1.1.2 Edit Custom Mode

To edit a **Custom Mode** first select it in the Display Modes list and click the **Edit Mode** button.

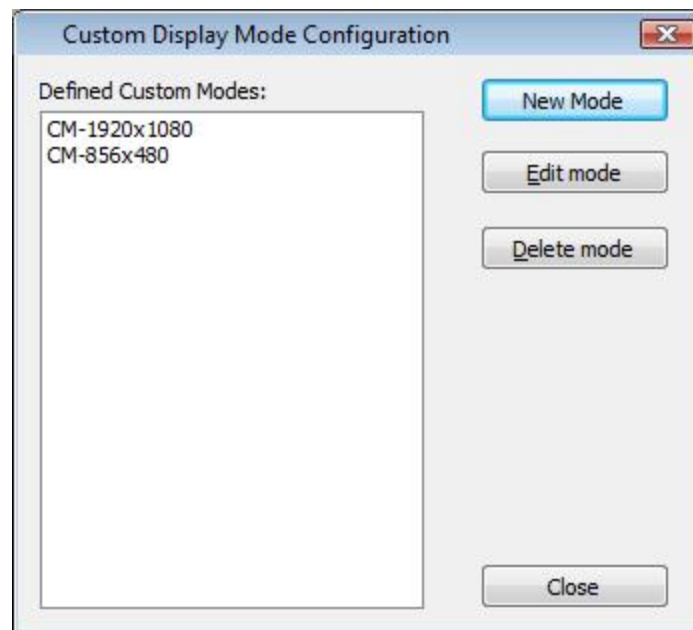


Figure 208 - Edit Node

Enter the exact settings required by the display devices being used. The edit mode allows the basic settings to be refined, before editing a custom mode, to get a stable full screen display.

After saving the Custom Mode, it will appear in the Virtual Screen Configuration dialog in the Single Screen Resolution drop-down menu with an asterisk (*) at the end.

7—Configuring ControlPoint Software

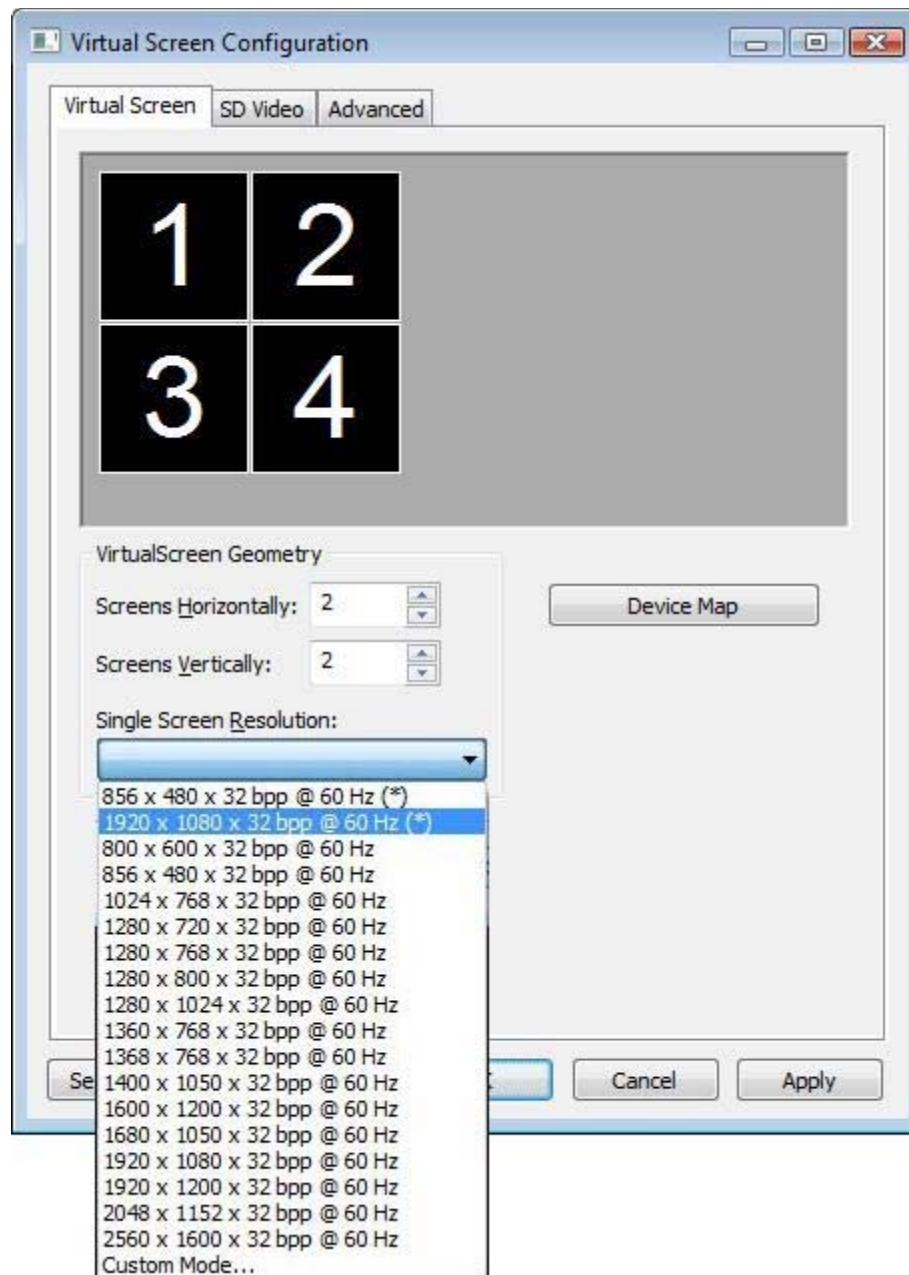


Figure 209 - Custom Mode with Asterisk

VSConfig

7.1.1.3 Delete Custom Mode

To delete a custom mode, first select it in the Display Modes list and then click the **Delete Mode** button. A confirmation dialog is displayed as shown below:

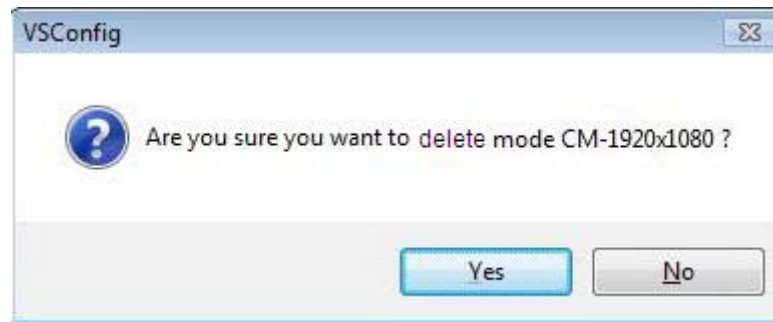


Figure 210 - Delete Custom Mode

7.1.1.4 Parameter Listing

The Parameter listing for the Custom Display Mode is given below:

Table 11: Parameter Listing

Parameters	Unit	Description
Mode		
Width	pixels	Width of visible pixels
Height	lines	Height of visible lines
Freq	Hz	Vertical display frequency
Pixel Clock	KHz	
Sync Type		Separate, Composite
Horizontal		
HTotal	pixels	Total pixels horizontal
HDisplay	pixels visible	Total visible pixels horizontal
HSyncWidth	pixels	Width of horizontal sync

7—Configuring ControlPoint Software

Table 11: Parameter Listing

Parameters	Unit	Description
HBackPorch	pixels	Width of horizontal back porch
HFrontPorch	pixels	Width of horizontal front porch
Hsync (Positive-Negative)		Set Positive or Negative sync pulse
Vertical		
VTotat	lines	Total lines vertical
VDisplay	lines visible	Total visible lines vertical
VSynWidth	lines	Width of vertical sync
VBackPorch	lines	Width of vertical back porch
VFrontPorch	lines	Width of vertical front porch
Vsync (Positive-Negative)		Set Positive or Negative sync pulse

Factory Defaults

7.2 Factory Defaults

Click the **Set Factory Defaults** button to revert all the settings to their original values. The following are the factory defaults in the Virtual Screen tab:

- 1x1 wall
- 1024 x768 resolution

7.2.1 SD Video Tab

The SD Video Tab should not be used for normal operation controls. The settings in this tab are for very minute adjustments and should not be altered without the direction of Jupiter Support. The default settings (shown in the figure below) are sufficient for normal use of the software.

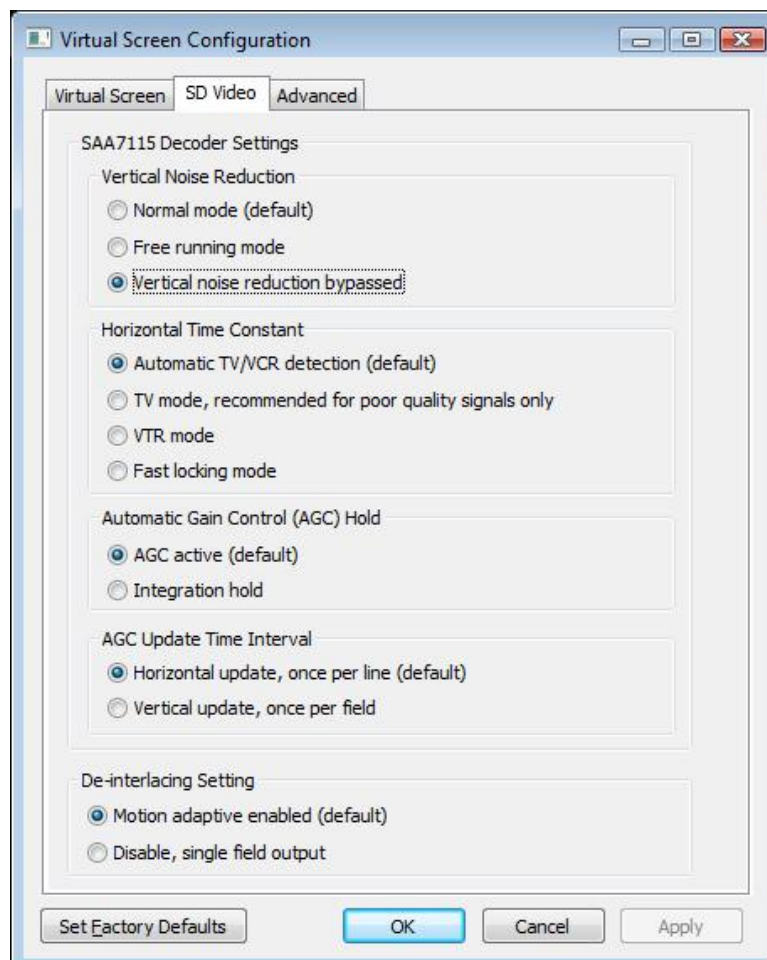


Figure 211 - SD Video Tab

7—Configuring ControlPoint Software

7.3 Advanced Tab

Click on the Advanced tab as shown below. These settings should not be changed during normal operation. The default settings are shown in the figure below.

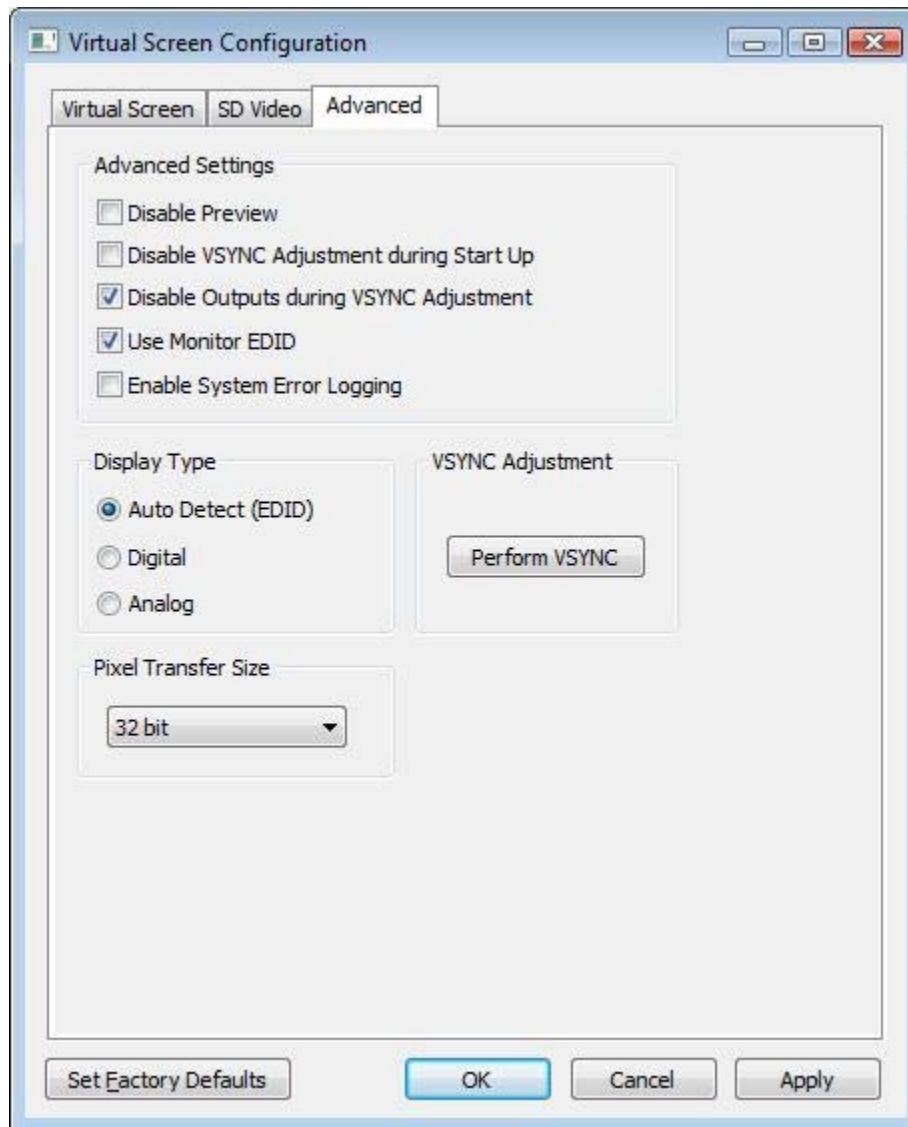


Figure 212 - Advanced Tab

- **Disable Preview:** This option is unchecked by default. When this option is checked, previews will not be shown.
- **Disable VSYNC Adjustment during Start Up:** This option is unchecked by default (i.e. VSYNC adjustment is active on startup by default).

Advanced Tab

However, in some cases, the default option may cause loading issues during VSYNC adjustments. In such cases, checking the “Disable VSYNC Adjustment during Start Up” option will allow investigation of the issues.

- **Disable Outputs during VSYNC Adjustment:** This option is checked by default. During VSYNC adjustment, output is disabled during adjustment transitions.
- **Use Monitor EDID:** This option is checked by default. When this option is checked, the system uses the EDID provided by display #1. If **Use Monitor EDID** is unchecked, a manual **Display Type** selection of **Digital** or **Analog** is required.
- **Enable System Error Logging:** This option is disabled by default. Selecting this creates a log of all the System Errors. The Error Log is in the following path: **Program Files (x86)/Jupiter/ControlPoint/SysError.log**. When the **Enable System Error Logging** option is chosen, the following warning message may appear. Click **OK**.

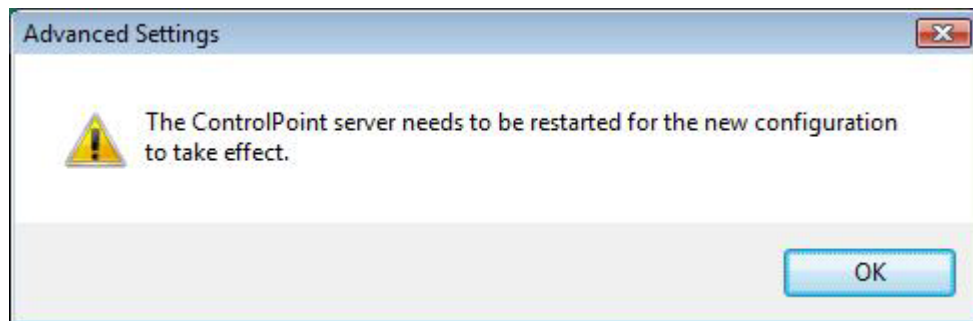


Figure 213 - Restart Warning

- **Display Type:** This option is on **Auto Detect (EDID)** by default. If the **Use Monitor EDID** option above is unchecked, the **Auto Detect (EDID)** option will be grayed out as well, forcing a manual selection of **Digital** or **Analog** under **Display Type**.
- **VSYNC Adjustment:** The **Perform VSYNC** button will adjust and align the timing of the wall displays.
- **Pixel Transfer Size:** This is a drop-down option offering 16-bit and 32-bit as choices. 16-bit transfers allow faster capture window frame rates. In Fusion Catalyst 4000, this field defaults to 16 bit when an expansion chassis is present; otherwise, it defaults to 32 bit.

7—Configuring ControlPoint Software

7.4 Device Map

In order for your system to operate properly, the Device Map must correctly describe your system. The following figure shows a representation of the **Device Map**.

1. Open the **Device Map** by starting the **VSConfig** dialog.
2. Click the **Device Map** button.

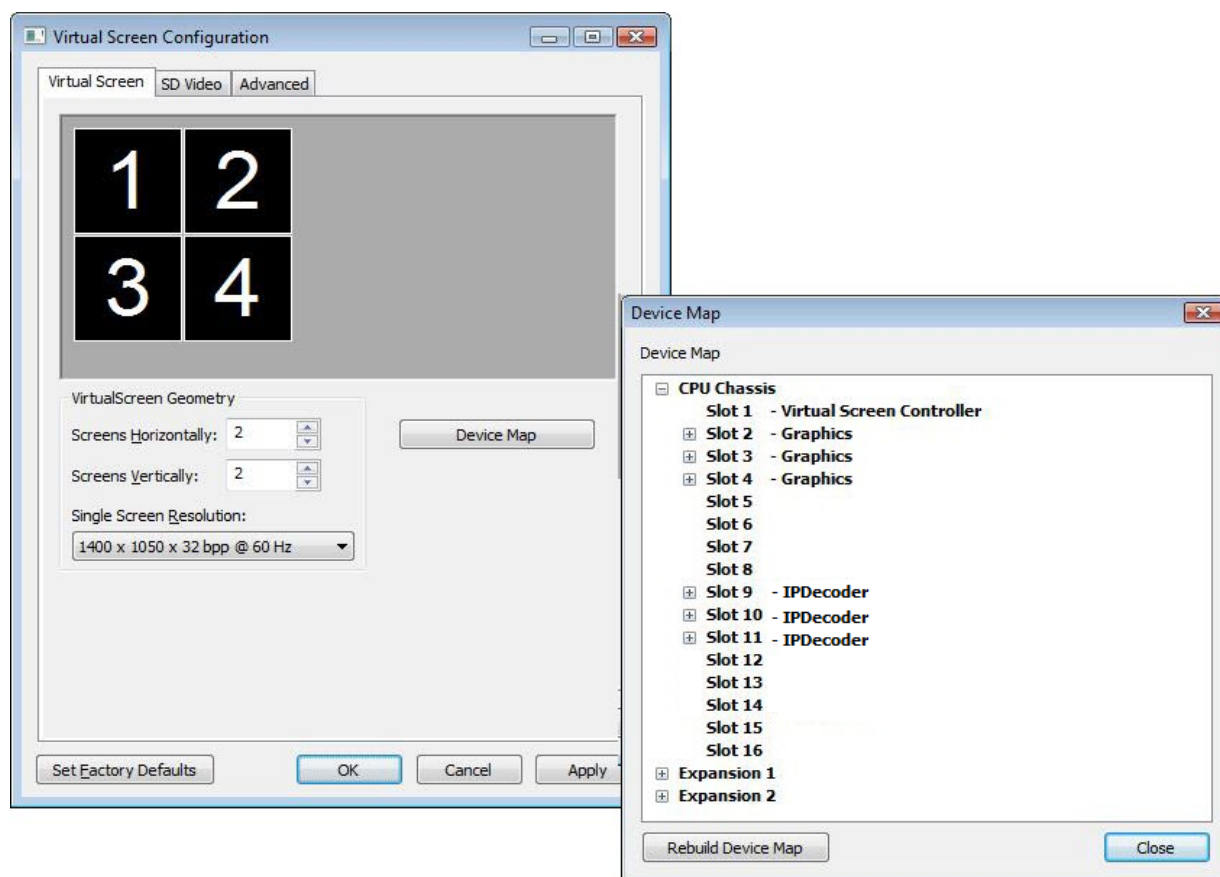


Figure 214 - Device Map

The **Device Map** dialog appears, displaying a tree-list of the system devices. If the dialog does not describe your system properly, go to the **Windows Device Manager** and check that all Fusion Catalyst Devices are correctly installed.

System Recovery

7.5 System Recovery

It is recommended that you set up your system for writing debugging information in case of system failure. A system failure sometime means a Blue Screen or system dump. When this happens, a data file is written on the hard drive to help with debugging the problem.

The two screen shots following show you how to enter the setup area and how to setup your system for this process.

We suggest that you configure for a full kernel dump but in cases where you may not be able to transmit a large multi-megabyte file it is at least helpful to have the mini-dump, which is only 65 K bytes.

Right click **My Computer** and then click **Properties** at the bottom of the menu. Select the **Advanced** tab then click the **Settings** button in the Startup and Recovery section.

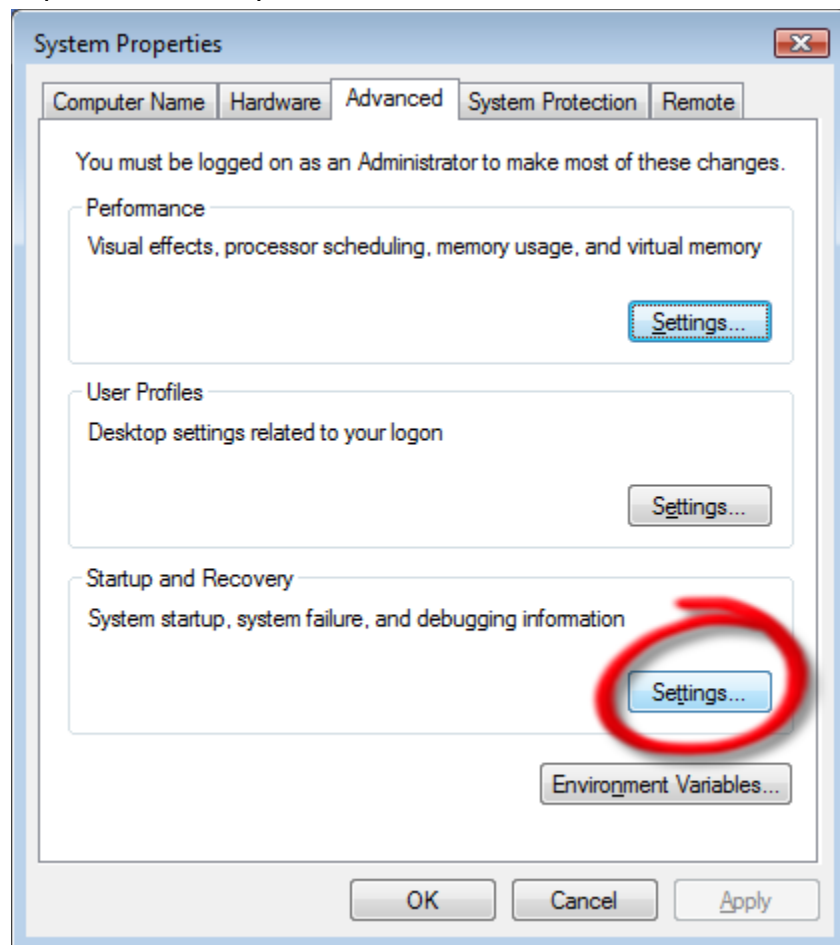


Figure 215 - System Properties

7—Configuring ControlPoint Software

When you click the **Settings** button you will be presented with the Startup and Recovery dialog shown below. Both items under **System Failure** should be unchecked as shown.

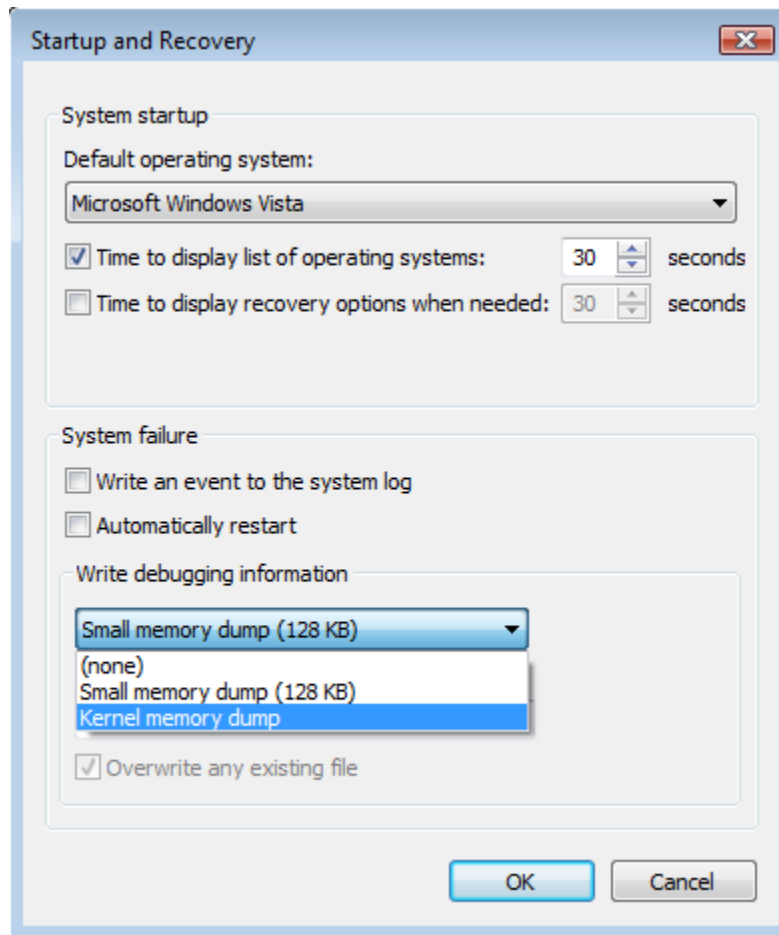


Figure 216 - Startup and Recovery

Click the drop-down box to reveal the options:

- (none)
- Small Memory Dump
- Kernel Memory Dump

Jupiter Systems recommends the **Small Memory Dump** option. The file name and path are shown in the text box entitled **Small dump directory**. You can change this to anything you wish. It is not necessary to

System Recovery

do so and you can always find the file name by looking here. You will find it by default (shown) in the root directory of your C: drive.

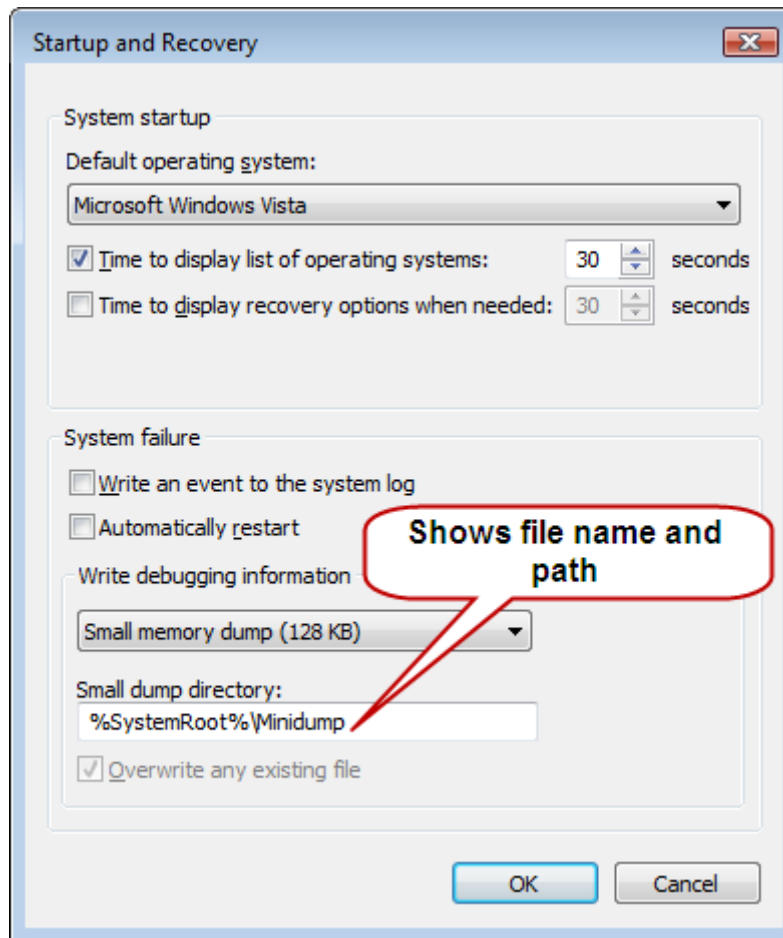


Figure 217 - File name and path

7—Configuring ControlPoint Software

7.6 Visual Effects

The following settings are required for optimal Fusion Catalyst performance in Windows 7.

Steps to do the settings:

1. Open **My Computer** properties dialog.
2. Select **Advanced System Settings**. The **System Properties** dialog appears as shown below.

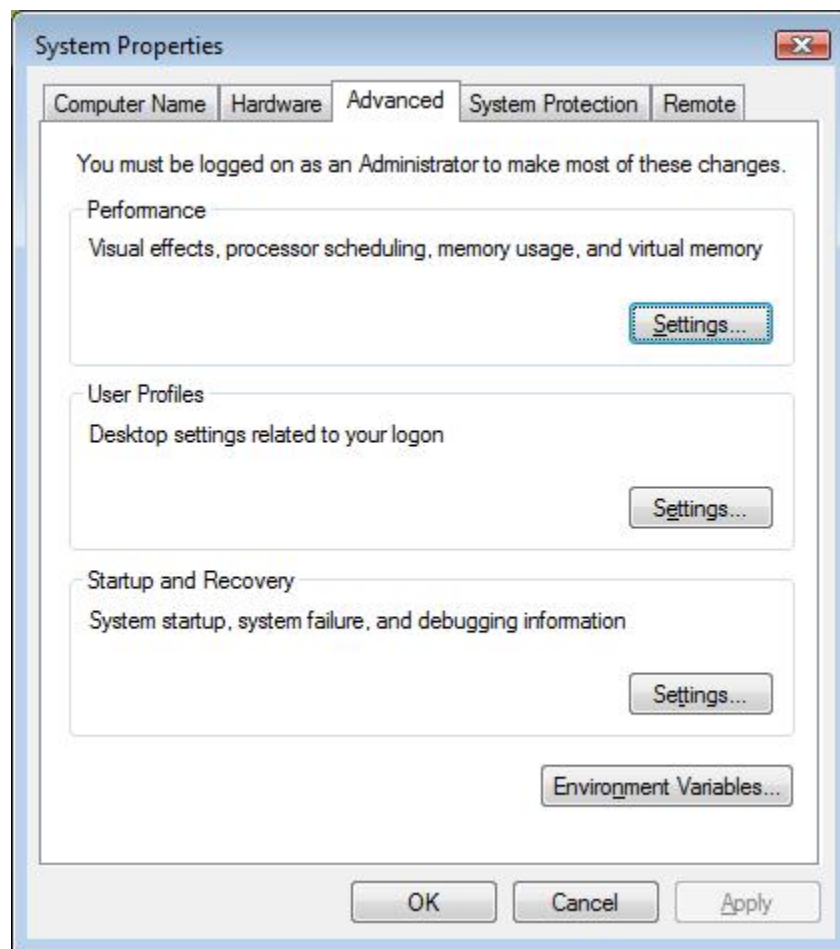


Figure 218 - Advanced System Settings

3. Select the **Advanced** tab on the **System Properties** dialog.
4. Click on the **Settings** button in the Performance group.

Visual Effects

The **Performance Options** dialog appears.

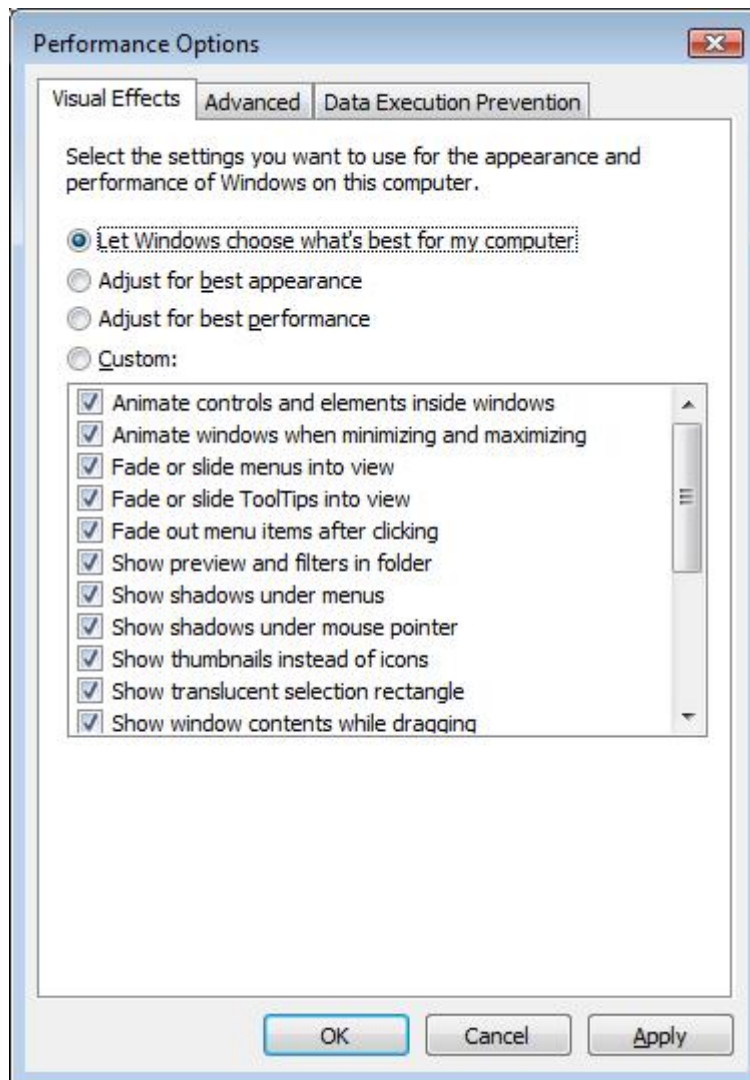


Figure 219 - Performance Options Dialog

5. Select the **Visual Effects** tab on the **Performance Options** dialog.
6. Select the **Adjust for best performance** option to un-check the entire list.
7. Select the **Custom** option.

7—Configuring ControlPoint Software

8. In the **Custom** item list, select (check) the following items, as shown on figures below:
- Animate controls and elements inside windows
 - Fade or slide menus into view
 - Fade or slide ToolTips into view
 - Fade out menu items after clicking

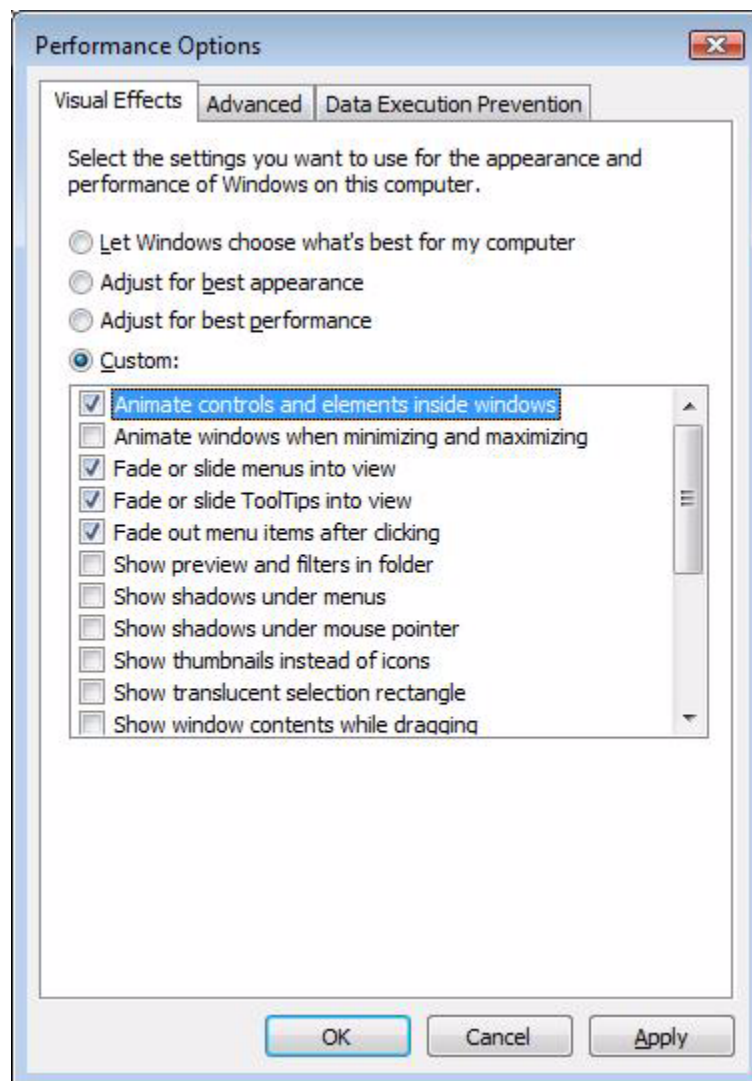


Figure 220 - Custom Items List

Visual Effects

9. Scroll down on the list and select the following items:

- Smooth edges of screen fonts
- Smooth scroll list boxes
- Use visual styles on windows and buttons

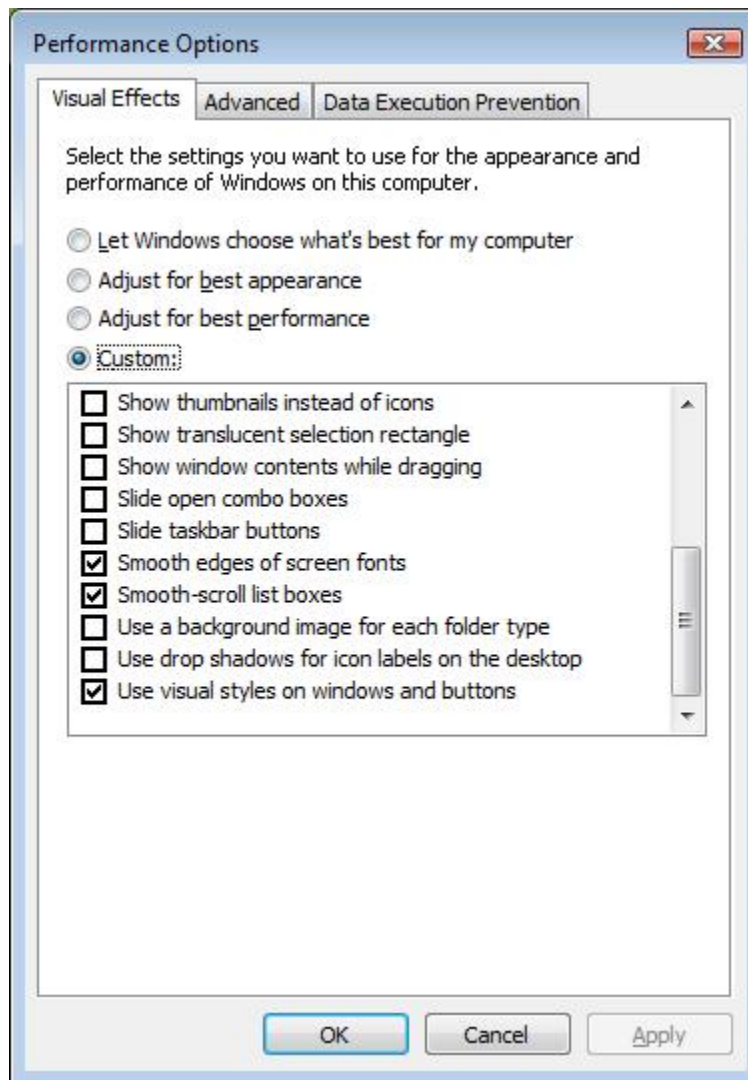


Figure 221 - Custom Items List (continued)

10. Click **Apply** and then **OK**.

7—Configuring ControlPoint Software

7.7 Uninstalling ControlPoint

Perform the following steps to uninstall ControlPoint:

1. Open **Control Panel—>Programs—>Uninstall Program**

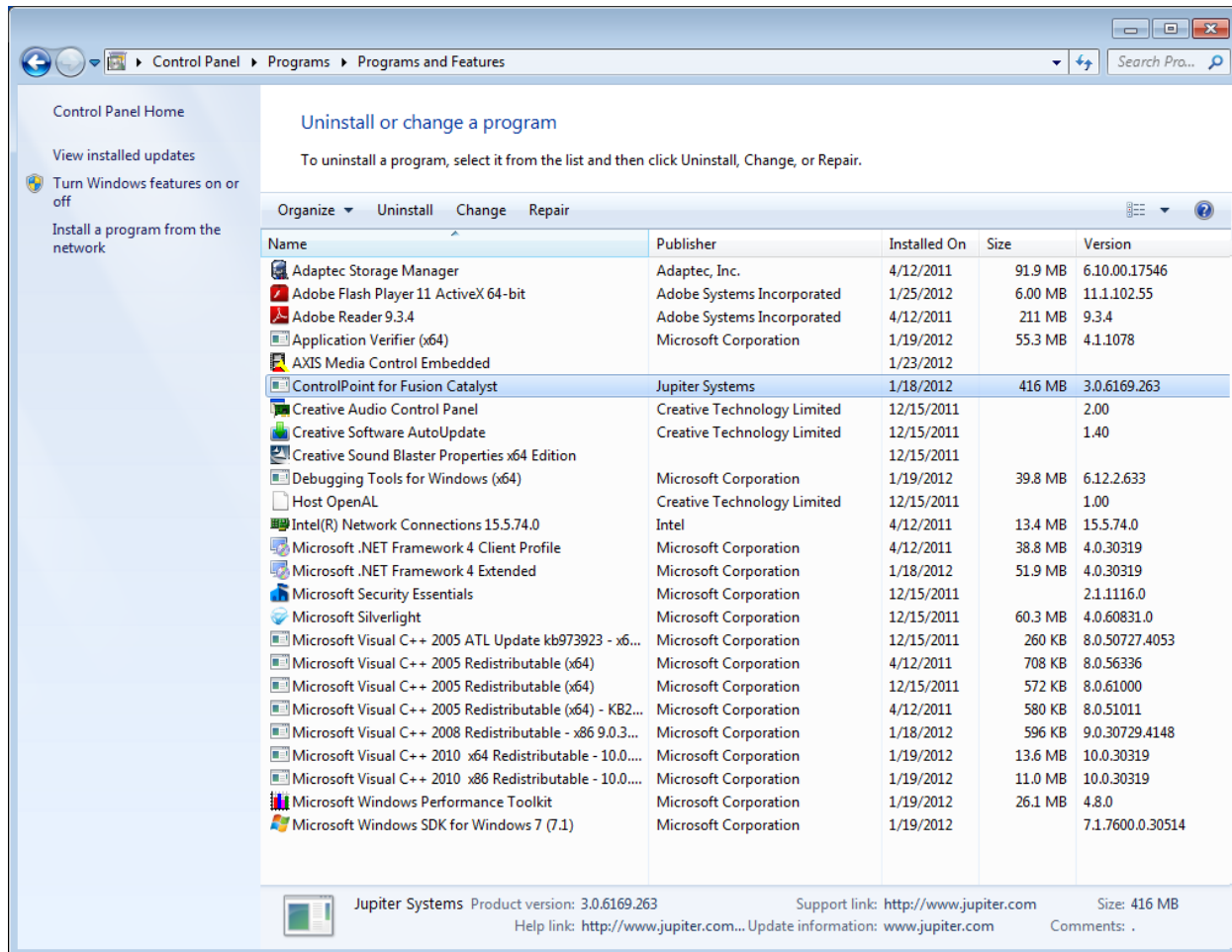


Figure 222 - Uninstalling ControlPoint

Uninstalling ControlPoint

2. Click **Uninstall**. The following Uninstall confirmation message will appear.

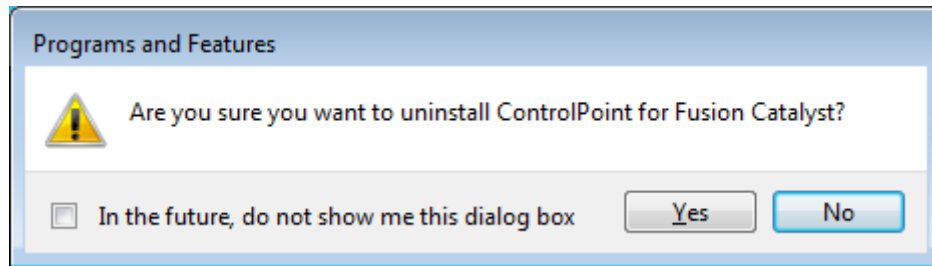


Figure 223 - Uninstall Confirmation

3. Click **Yes**.
4. The following reboot message will appear. Click **OK**.

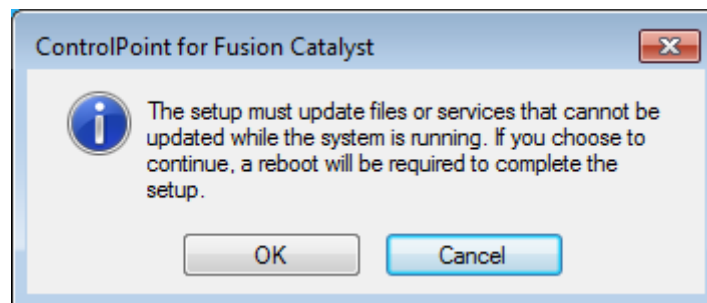


Figure 224 - Reboot Message

The uninstall progress will be displayed in the following message:

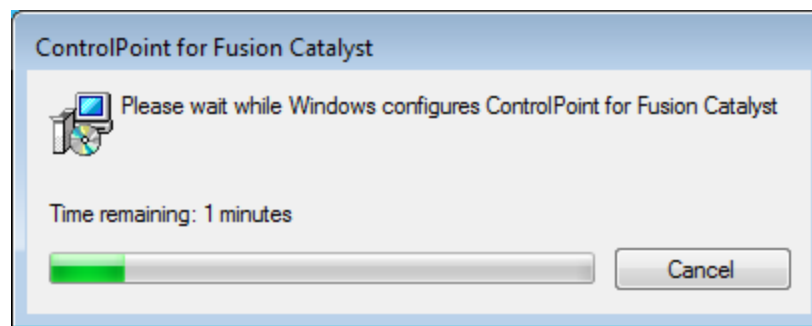


Figure 225 - Progress Bar

7—Configuring ControlPoint Software

The windows will go black on the display wall as the drivers are shutting down. Only the boot board window will be active. After all the drivers are shut down, the shutdown message appears in the boot board window.

5. Restart the system.

Warning Uninstalling ControlPoint will remove Virtual screen dimensions and display resolutions from the system. VSConfig will need to be executed after reinstallation.

Updating ControlPoint

7.8 Updating ControlPoint

Warning ControlPoint needs to be uninstalled before updating.

1. Run the install.exe file at the root on the CD (if autorun is not enabled) and follow instructions on the HTML file:

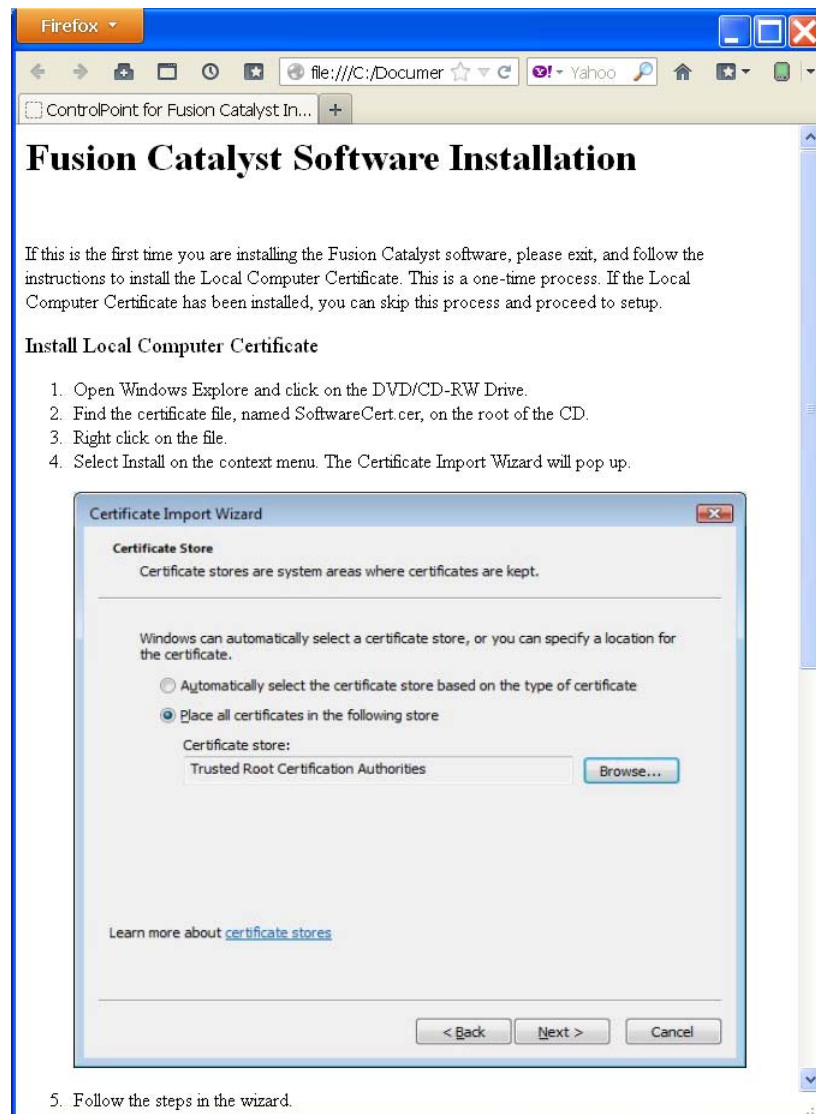


Figure 226 - HTML File Instructions

7—Configuring ControlPoint Software

2. Upon completing the instructions on the HTML file from [Figure 226 - HTML File Instructions](#), continue with the InstallShield Wizard with the following screens.

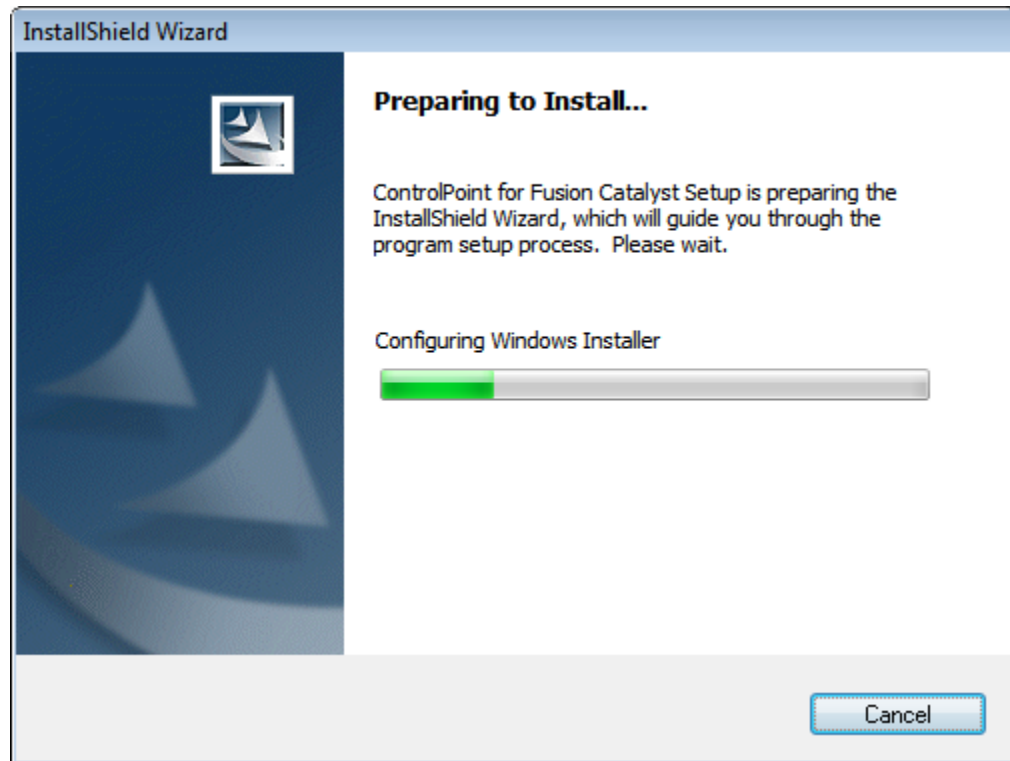


Figure 227 - Preparing to Install

Updating ControlPoint

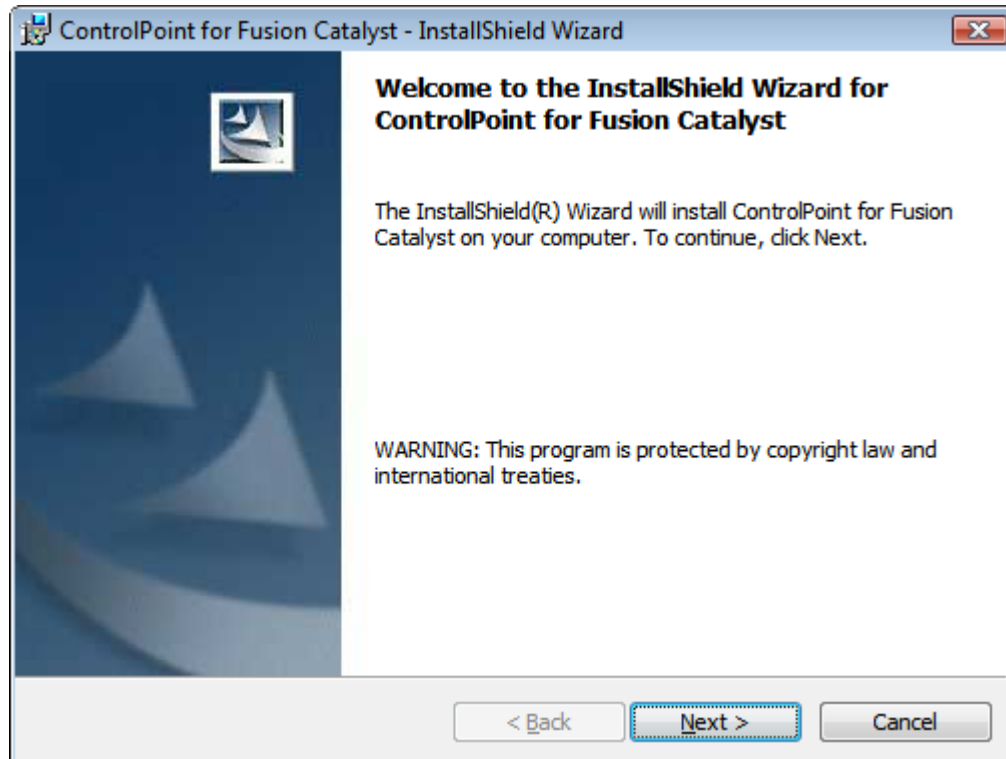


Figure 228 - Welcome screen

3. Click **Next**.
4. Choose the **"I accept the terms in the license agreement"** option and click **Next**.

7—Configuring ControlPoint Software



Figure 229 - License Agreement

5. Choose the **Typical** option. Click **Next**.

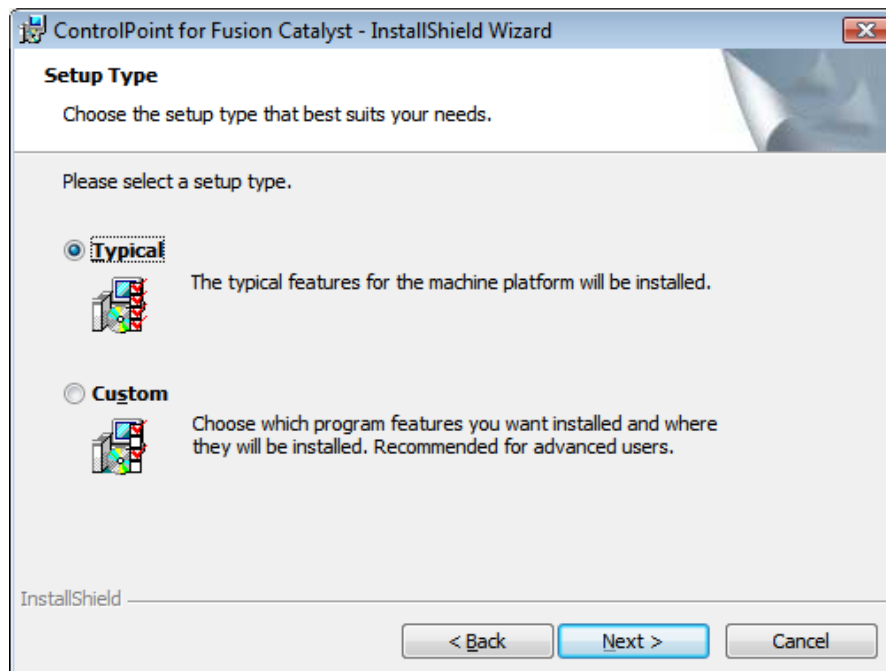


Figure 230 - Setup Type

Updating ControlPoint

6. Click **Install**.

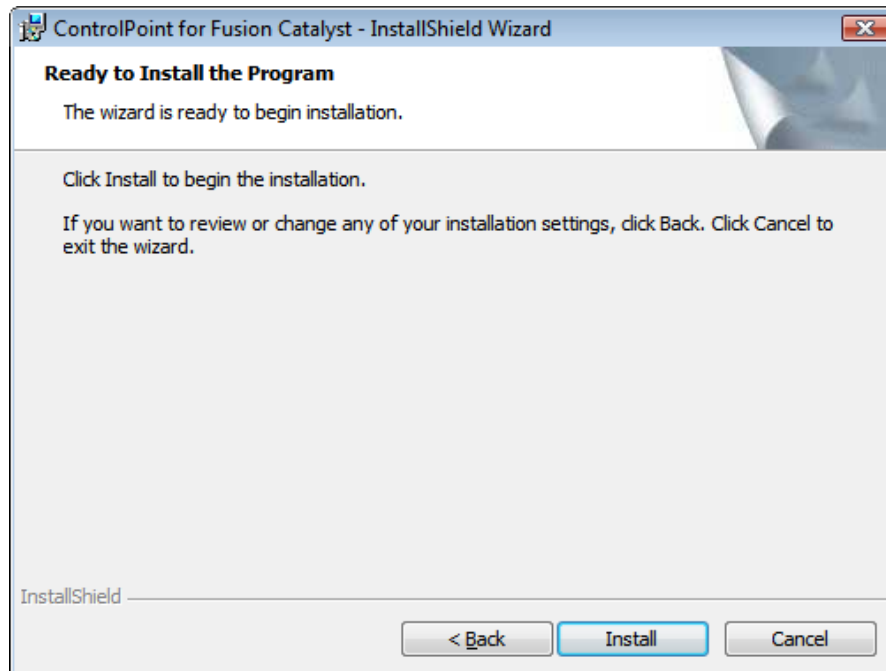


Figure 231 - Install the Program

The following screen shows the installation progress:

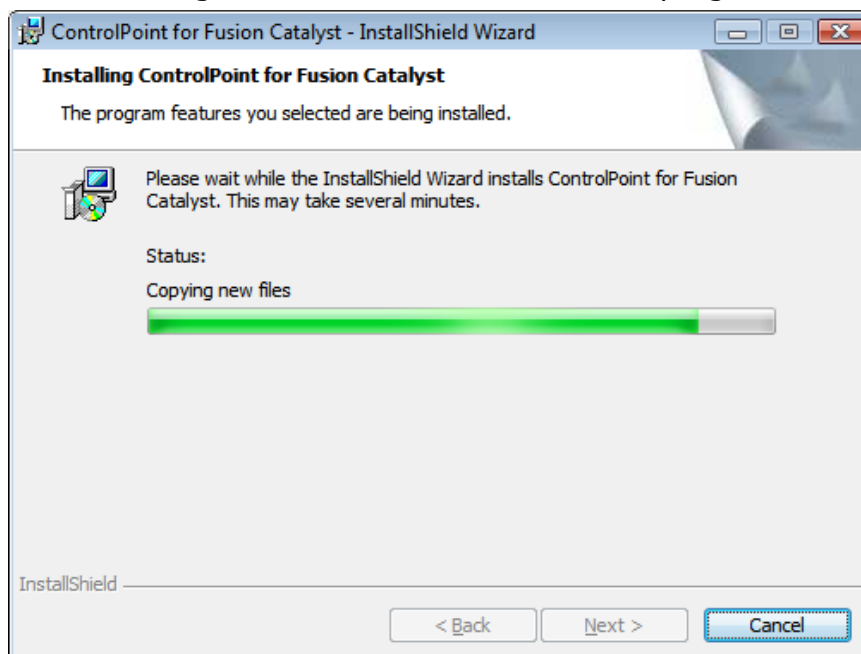


Figure 232 - Installation Progress

7—Configuring ControlPoint Software

7. Click **Finish**.

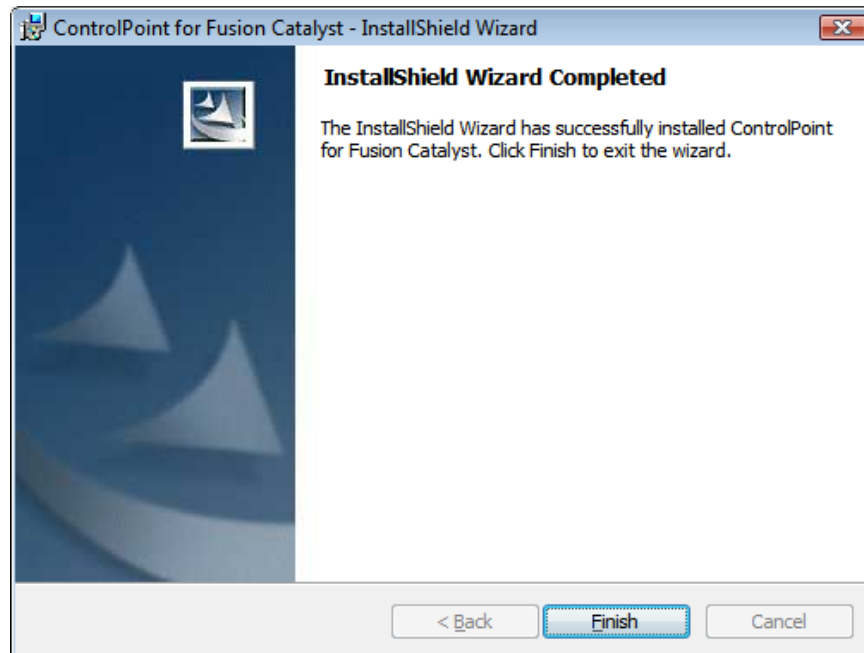


Figure 233 - Complete Installation

8. Click **Yes** to restart the system.

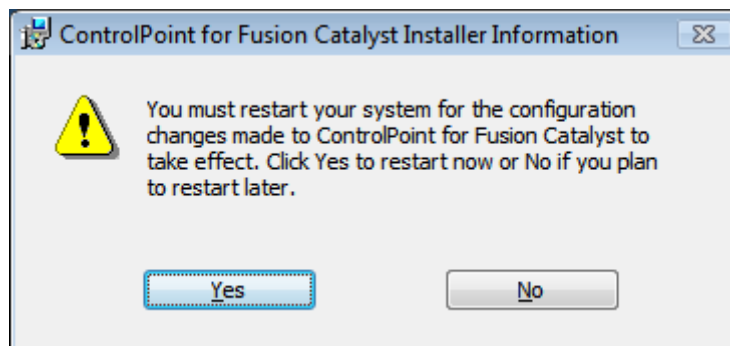


Figure 234 - Restart the System

Updating ControlPoint

At the end of Installation, the **Device Manager** should display the following Catalyst Device Drivers:

- Catalyst Virtual Screen Controller (under **Display adapters**)
- Catalyst Dual Output Device (under **Fusion Catalyst Display adapters**)
- Dual Channel DVI Capture Device (under **Catalyst Dual Channel DVI Capture Devices**)
- Octal Video Device (under **Catalyst Octal Video Devices**)
- Quad HD Decoder Device (under **Fusion Catalyst IP Decoder Adapters**)

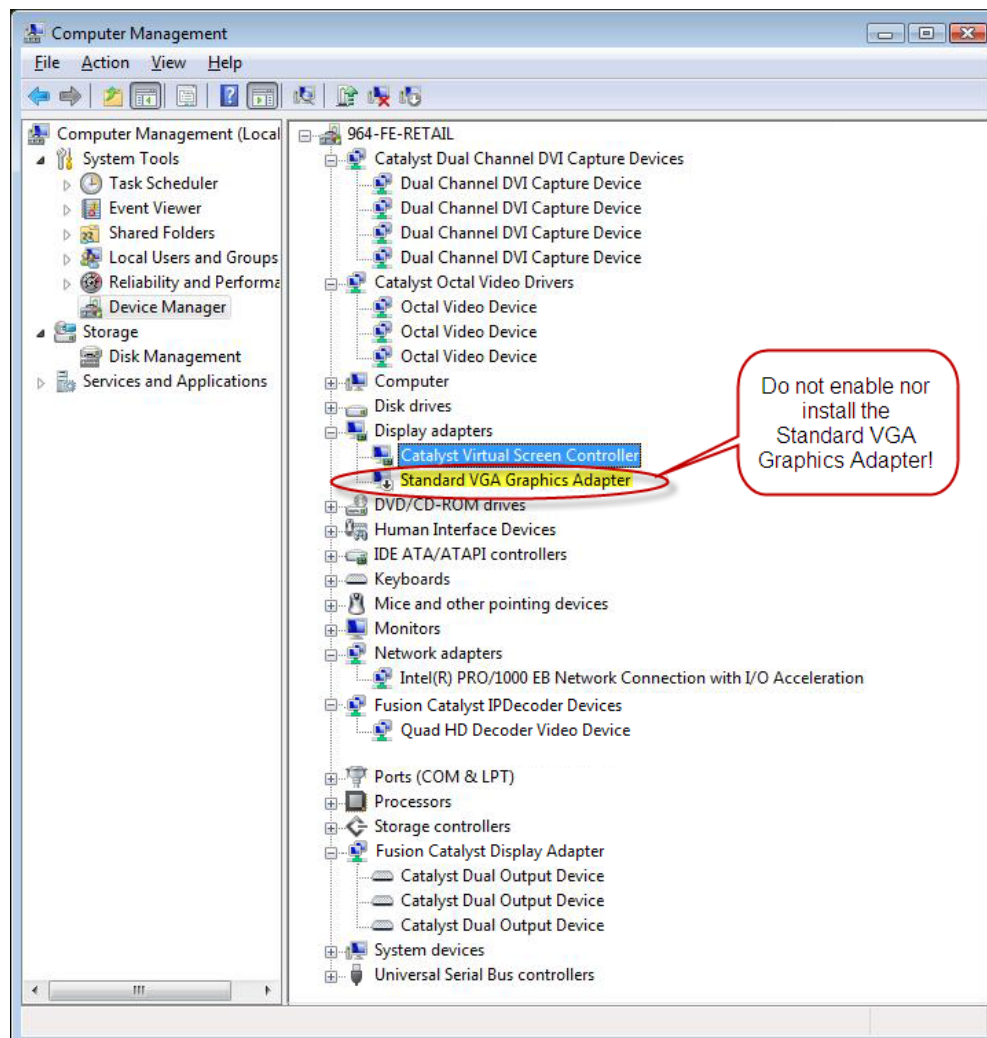


Figure 235 - Catalyst Device Drivers for Fusion Catalyst 4000

9. If prompted to Restart Windows, click **Yes**.

7—Configuring ControlPoint Software

Note	The PixelNet Firmware is not installed with ControlPoint but is available in the Software CD in the following location: CD:\ControlPoint\Utilities\PixelNetFirmware
-------------	--

7.9 Installing RemoteClient

Perform the following to install RemoteClient:

1. Run the install.exe file at the root on the CD (if autorun is not enabled).

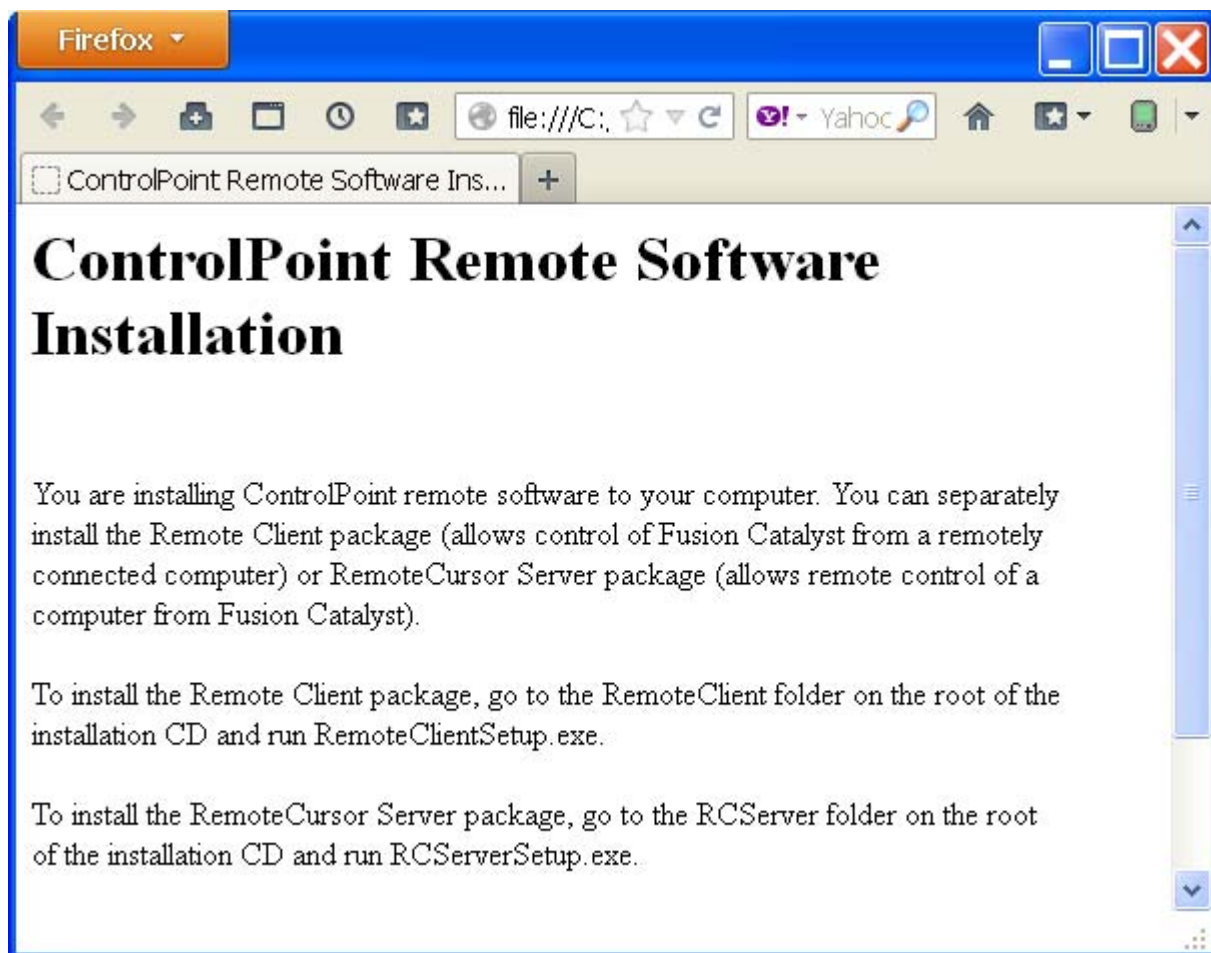


Figure 236 - RemoteClient Installation

Installing RemoteClient

The next dialog will be as follows:

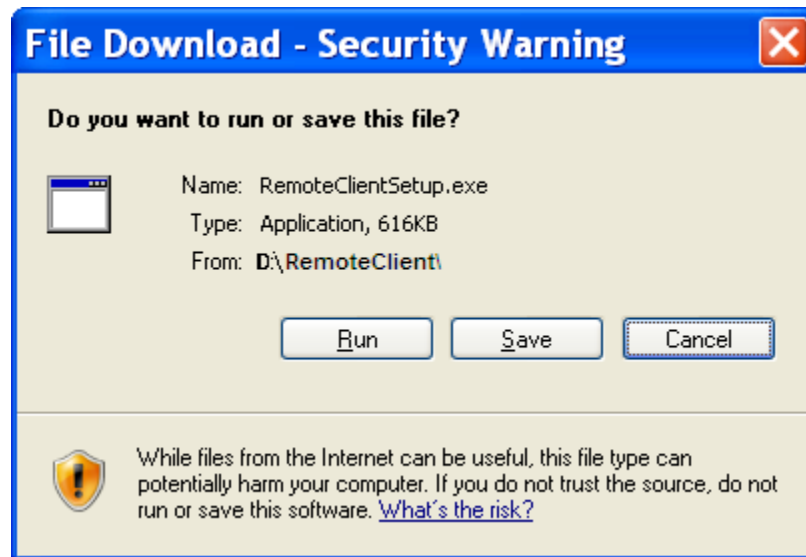


Figure 237 - Security Warning

2. Click **Run**.
3. Another Security Warning dialog appears. Click **Run**.

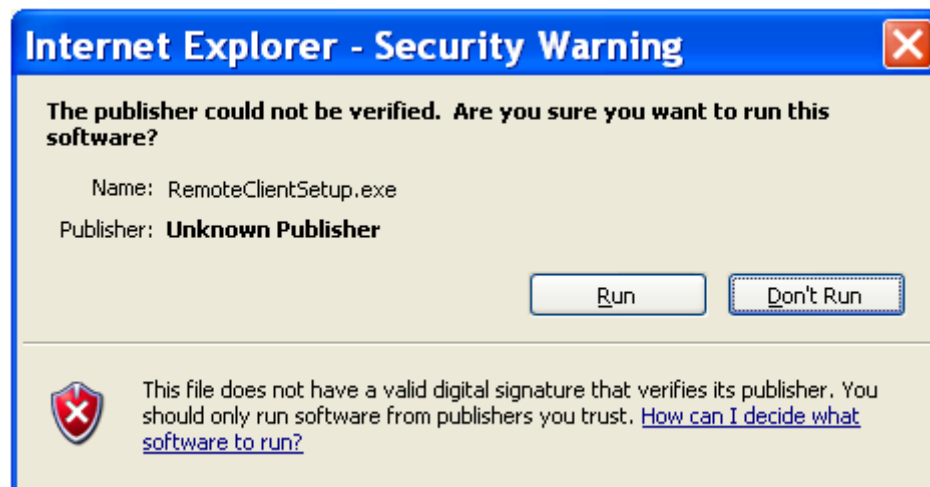


Figure 238 - Unknown Publisher Warning

7—Configuring ControlPoint Software

4. The software begins installing and the Welcome screen appears. Click **Next**.

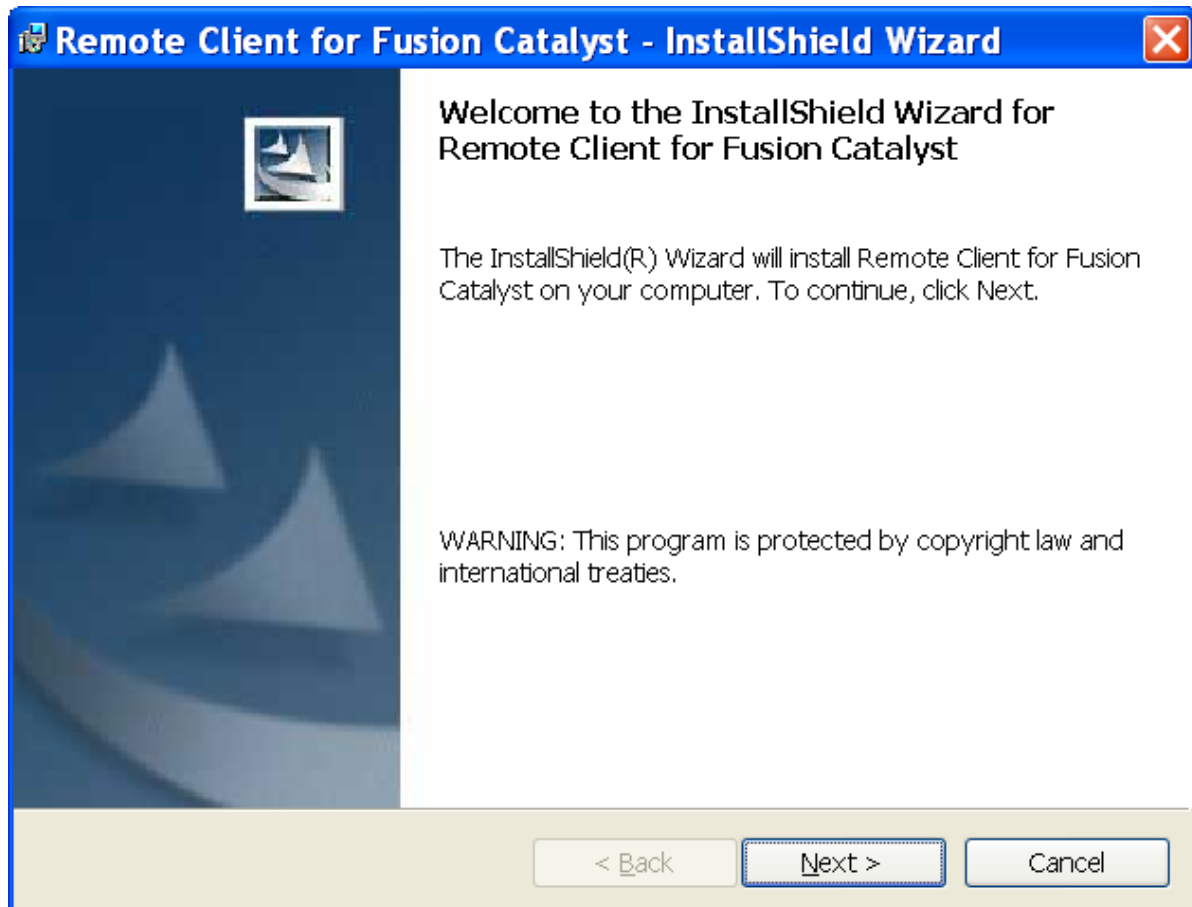


Figure 239 - Welcome Screen

Installing RemoteClient

5. Choose the **"I accept the terms in the license agreement"** option and click **Next**.

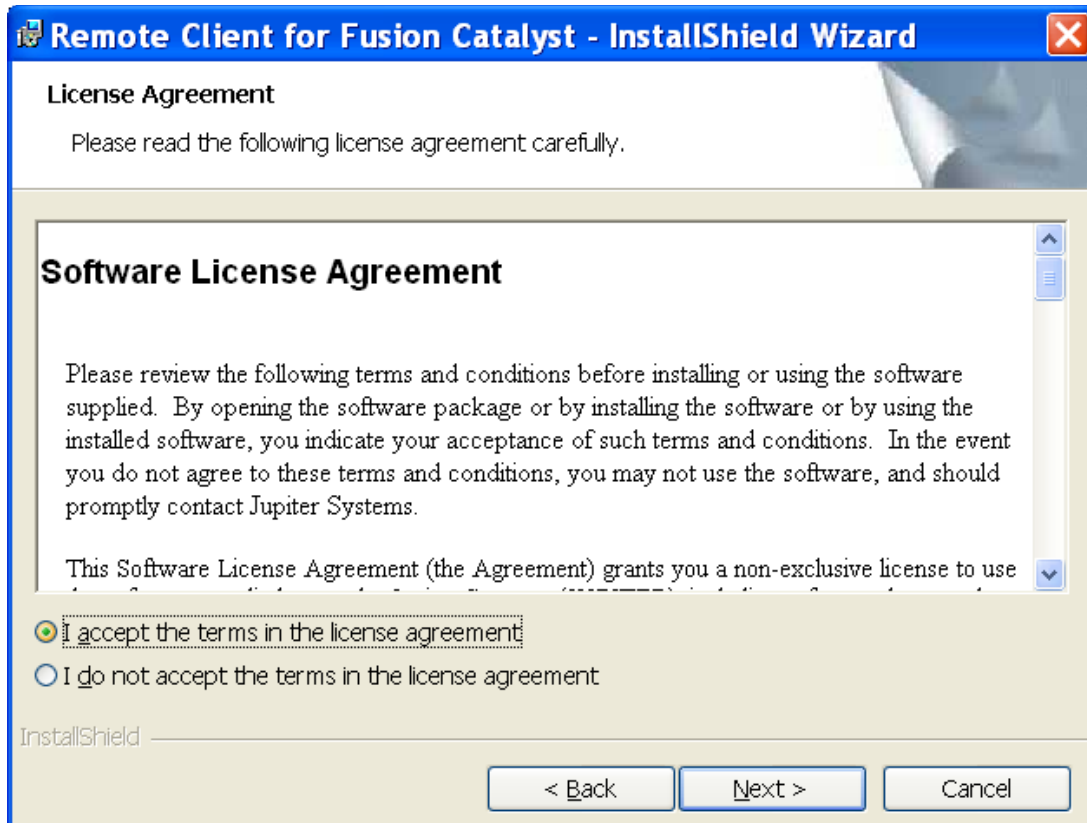


Figure 240 - License Agreement

7—Configuring ControlPoint Software

6. Installation on client computer message appears. Click **Next**.

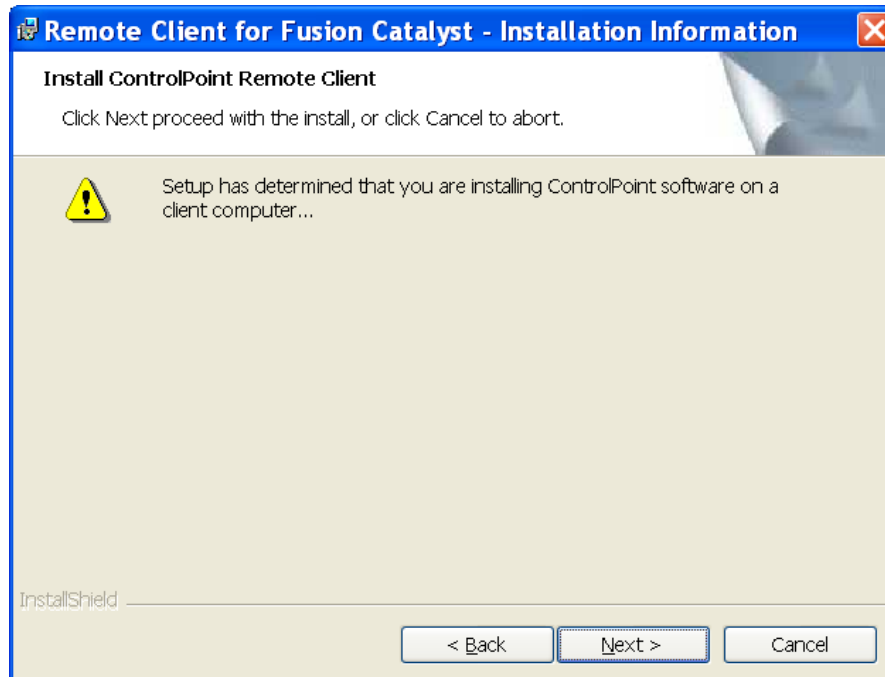


Figure 241 - Installation on Client Message

The following screen shows the installation progress:

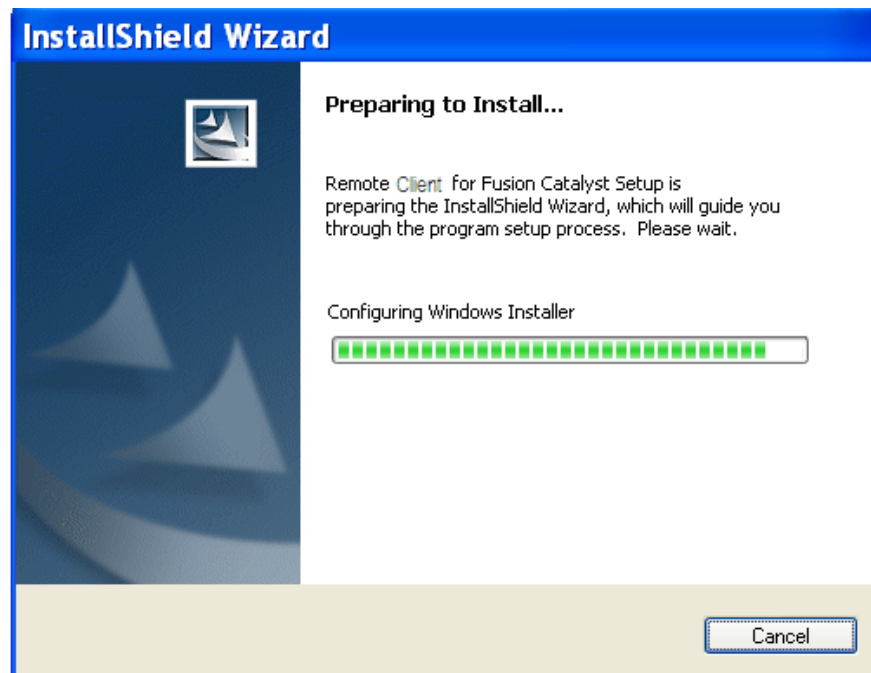


Figure 242 - Installation Progress

Installing RemoteClient

7. Click **Finish**.

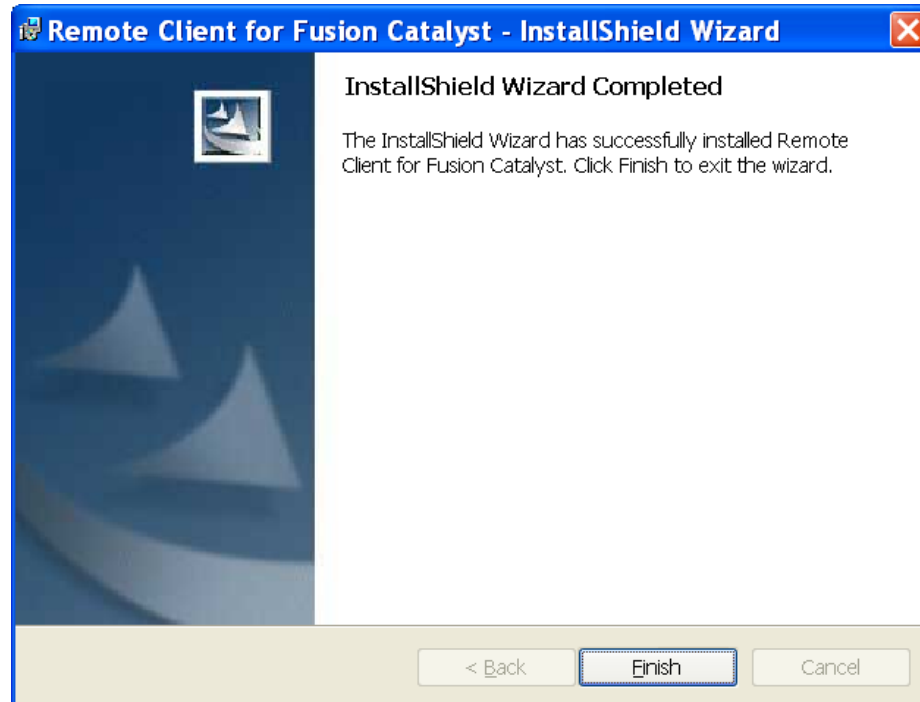


Figure 243 - Complete Installation



Chapter 8—Remote Cursor

8. Remote Cursor

8.1 Introduction to Remote Cursor

Remote Cursor is a functionality that allows remote mouse cursor and keyboard control of your display wall from the ControlPoint Client application running on a workstation. **Remote Cursor** gives you the ability to control your graphics display from a remote location. **Remote Cursor** will allow you to use your local (remote Windows system) mouse and keyboard to remotely control the display as if they were the keyboard and mouse of the display Wall Controller itself. **Remote Cursor** will also allow you to remotely login to your Wall Controller.

Upon activation of the **Remote Cursor**, you will have full keyboard operation as well as full mouse control of the controlled (server) system. All normal keyboard combinations are operational with the exception of the **Windows** keys (see [“Features and Limitations” on page 273](#).) You will have use of both mouse buttons as well as the mouse wheel if you have a mouse with wheel installed on the server system.

8—Remote Cursor

8.2 Installing RemoteCursor Server

Perform the following to install RemoteCursor Server:

1. Run the install.exe file at the root on the CD (if autorun is not enabled) and follow instructions on the HTML file.

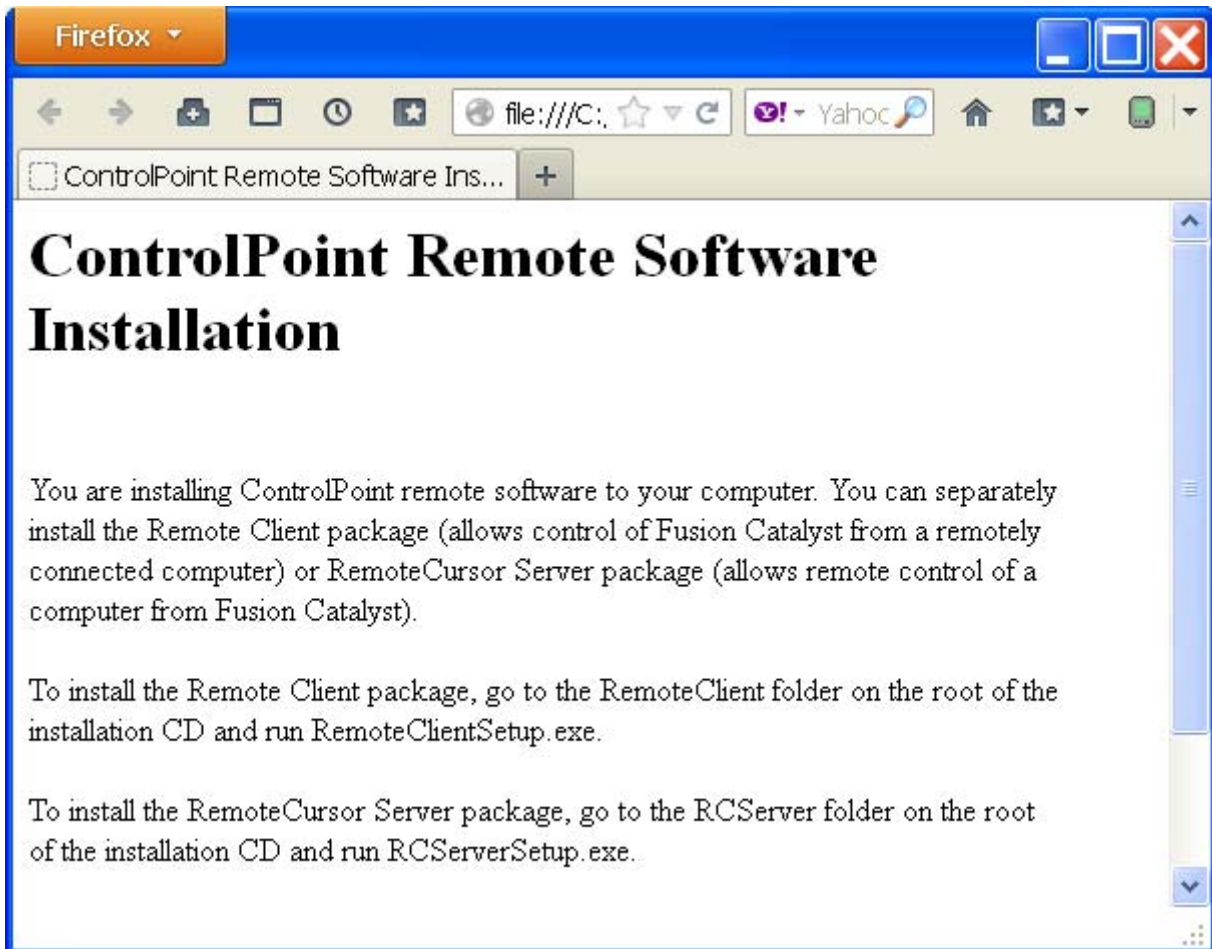


Figure 244 - RemoteCursor Server Installation

Installing RemoteCursor Server

- The next dialog will be as follows:

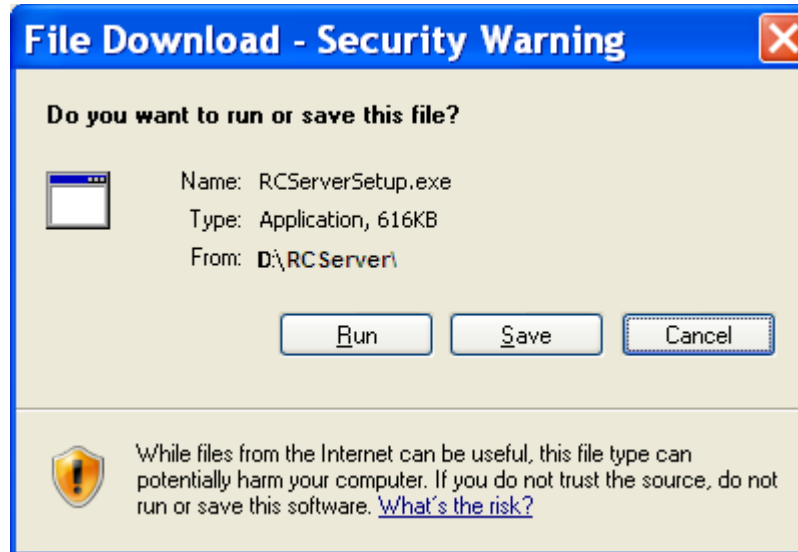


Figure 245 - Security Warning

- Click **Run**.
- Another Security Warning dialog appears. Click **Run**.

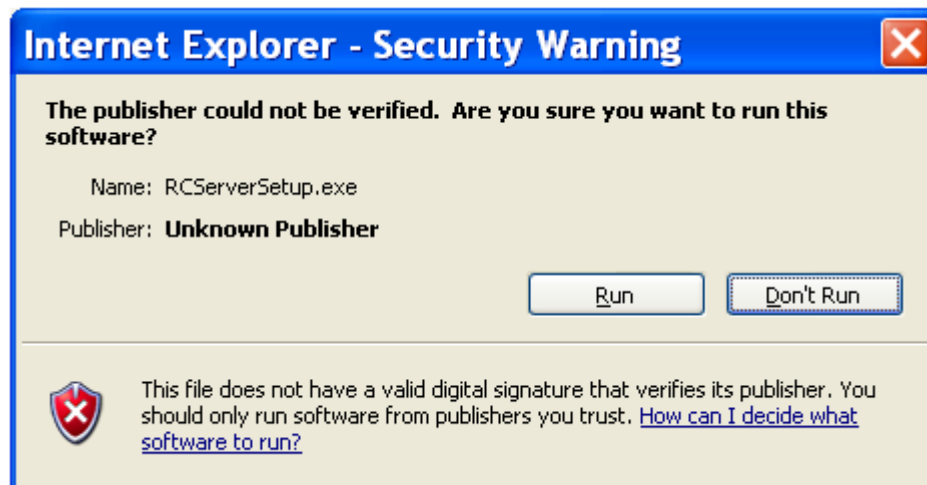


Figure 246 - Unknown Publisher Warning

8—Remote Cursor

5. The software begins installing and the Welcome screen appears. Click **Next**.

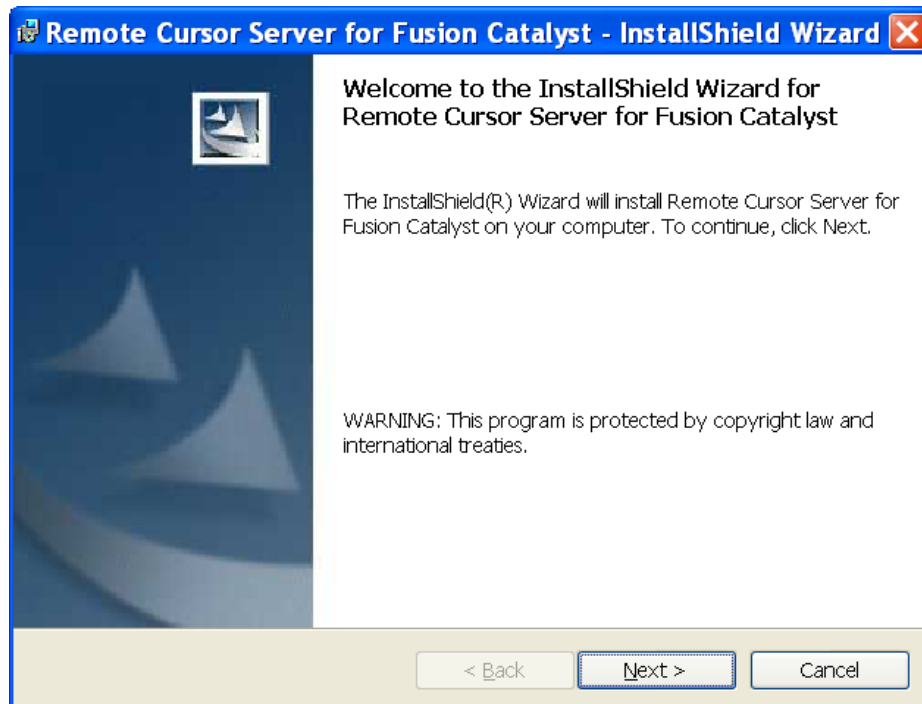


Figure 247 - Welcome Screen

Installing RemoteCursor Server

6. Choose the **"I accept the terms in the license agreement"** option and click **Next**.

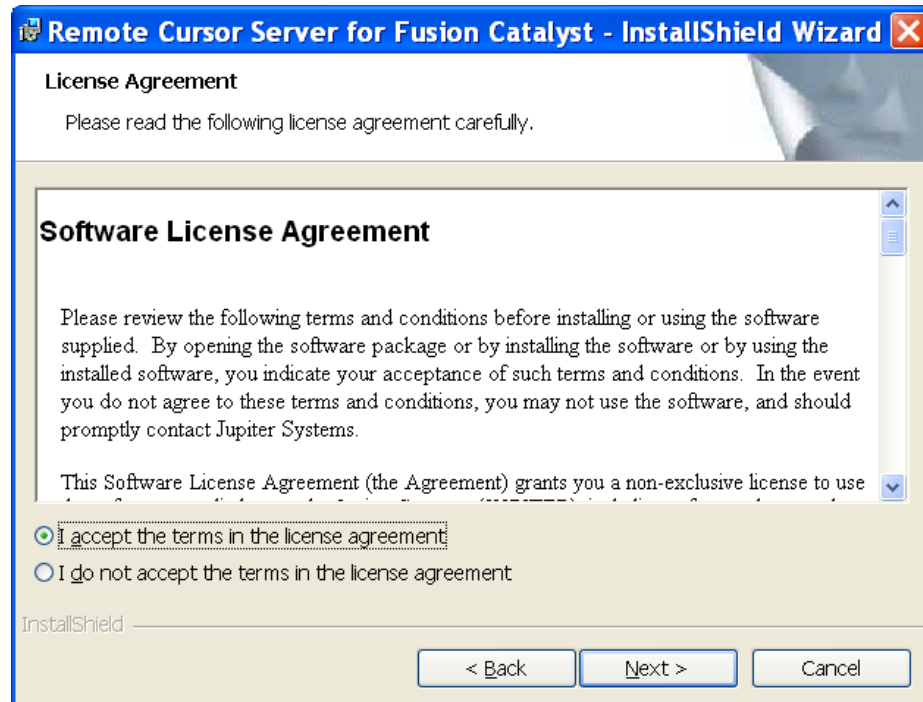


Figure 248 - License Agreement

8—Remote Cursor

7. Installation on client computer message appears. Click **Next**.

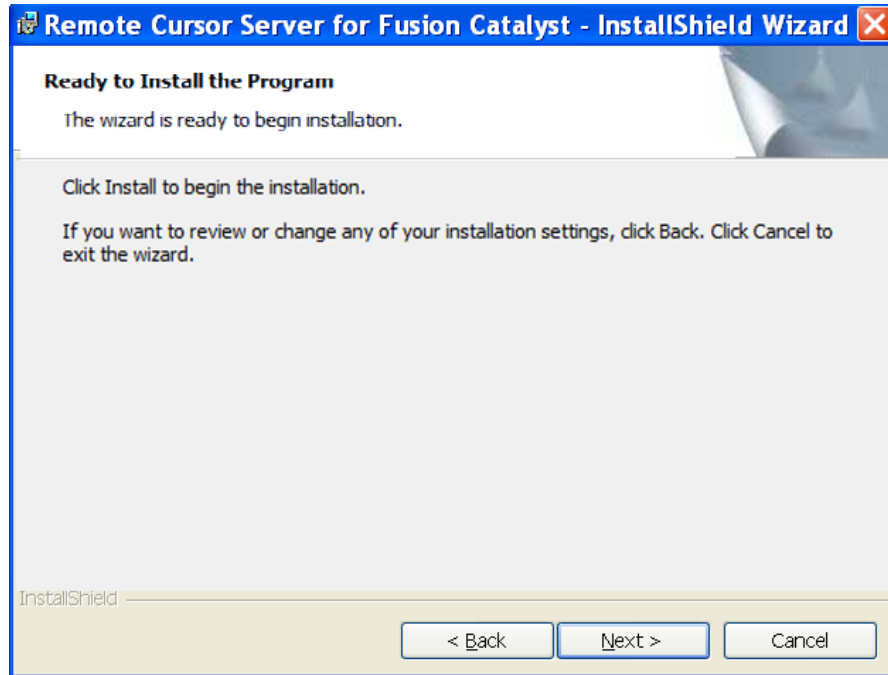


Figure 249 - Installation on Client

Installing RemoteCursor Server

The following screen shows the installation progress:

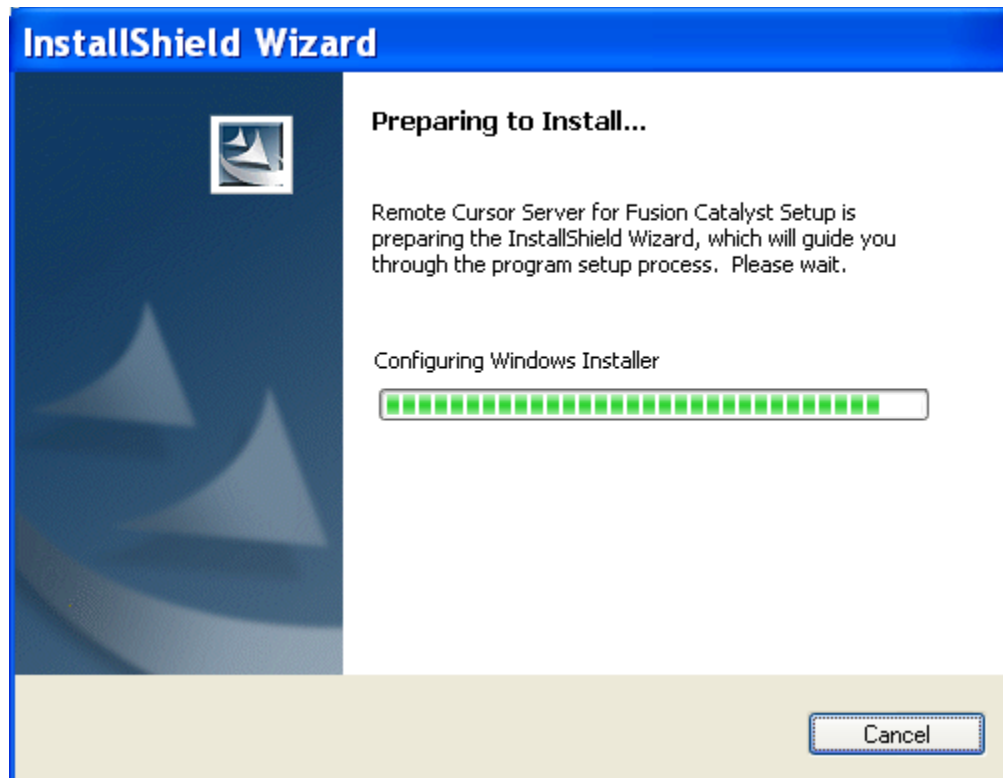


Figure 250 - Installation Progress

8—Remote Cursor

8. Click **Finish**.

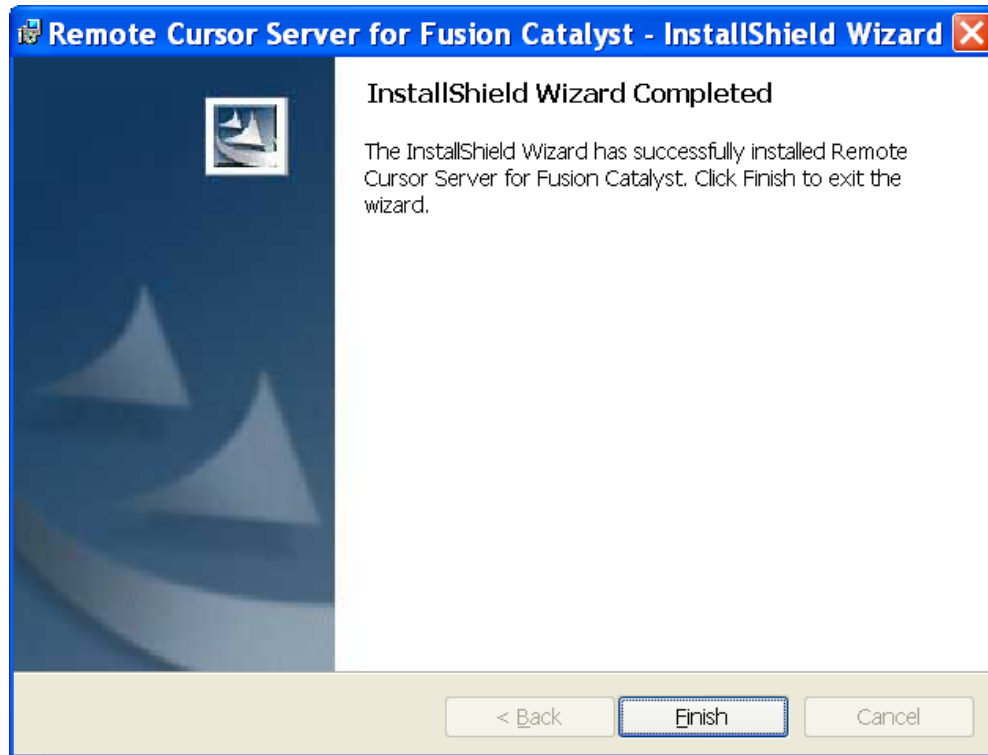


Figure 251 - Complete Installation

8.3 Remote Cursor Operation

There are four ways to activate **Remote Cursor**:

- Windows **All Programs** Menu (Jupiter/ControlPoint/Remote Client)
- **ControlPoint Remote Client**,
- Hot keys, or
- Command line

Remote Cursor Operation

With **ControlPoint Remote Client**, activate from the **Wall** menu, select the **Activate Remote Cursor** menu item as shown in the figure below.

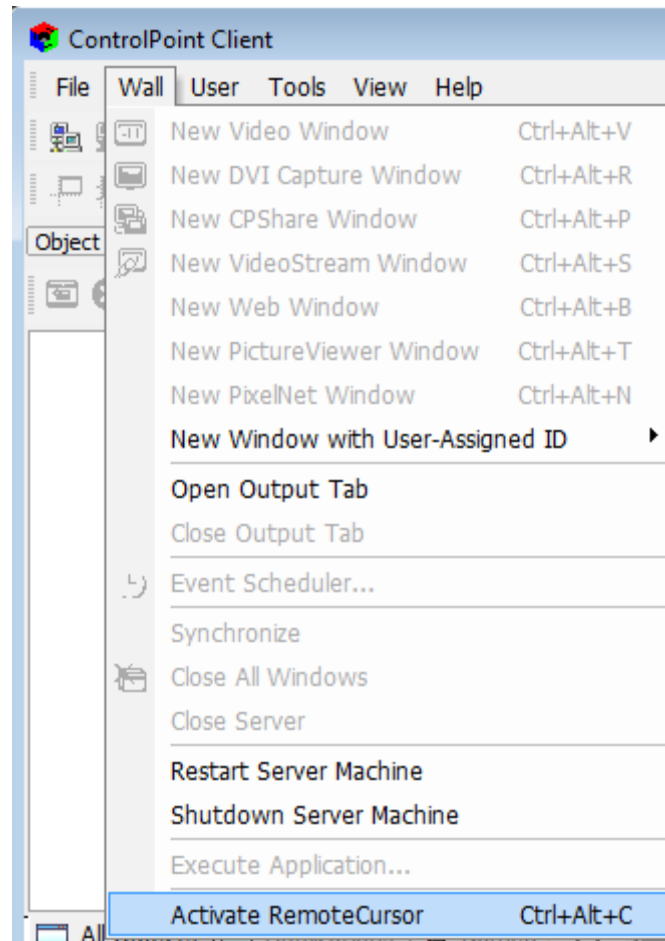


Figure 252 - Activate Remote Cursor with ControlPoint Remote Client

To activate **Remote Cursor** by hotkeys, the **Remote Cursor Client** or **ControlPoint Client** must be running. These hot-keys are configurable from the **View -> Options...** dialog-box as shown in the next figure. There are two hot-key combinations that are reserved for **Remote Cursor**:

- **Ctrl+Alt+C** – toggles **Remote Cursor** on/off
- **Ctrl+Alt+Backspace** – emulates **Ctrl+Alt+Del** on the display wall controller while **Remote Cursor** is running.

8—Remote Cursor

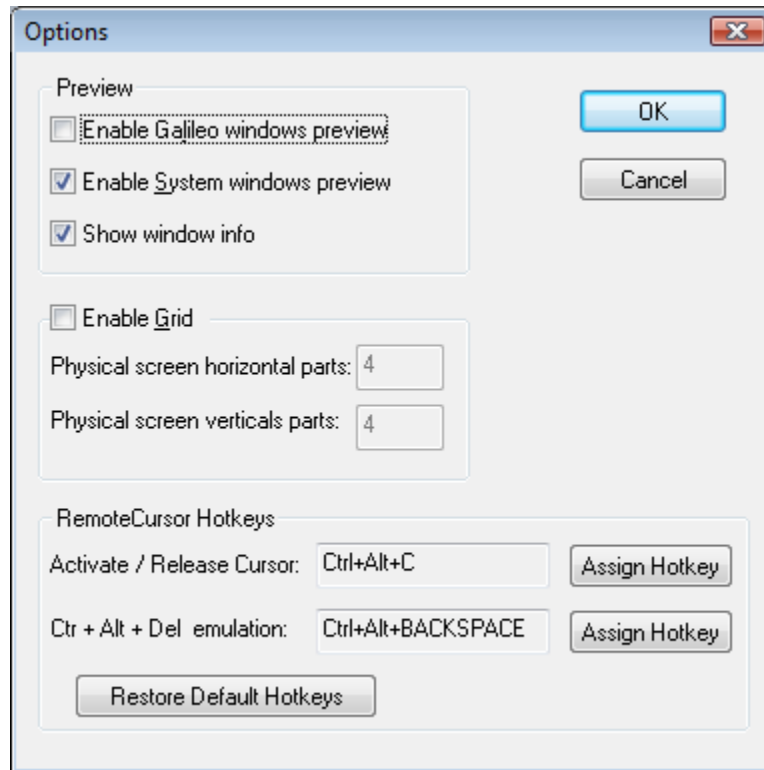


Figure 253 - Remote Cursor Options

- **Remote Cursor** can also be activated by issuing the command line in the Command Prompt window. Open a Command Prompt window, type the following command line to activate the **Remote Cursor**:

RCClient Server_name User_name Password

Server_name is the name or IP address of the server located on a separate machine.

User_name is the authorized user name on that server.

Password is a field that is not presently supported.

If the **Password** is missing, **Remote Cursor** will try to connect to the server without it.

If either the **Server_name** or the **User_name** is missing, **Remote Cursor** will not try to establish a connection; instead, it prompts the user

Remote Cursor Operation

for necessary information. With the **Remote Cursor** function activated, all mouse movements and keyboard strokes will be forwarded and executed on the display wall controller that ControlPoint Client is connected.

To stop **Remote Cursor**, press **Ctrl+Alt+C**. The same hot-key combination is used to toggle Remote Cursor on and off without the need to active it from the menu item. You can use the **Ctrl+Alt+C** key combination at any time to switch (back and forth) between the controlling computer and controlling the server system.

To release the cursor, press the hot keys described on the Remote Cursor Message Dialog (as shown in the figure below). The same hot-keys are used to toggle **Remote Cursor** on and off without the need to active it from the menu item.

There is a hot-key combination that emulates **Ctrl+Alt+Del** on the display wall controller while **Remote Cursor** is running. It is also described on the Message Dialog.

After the cursor is released, **Remote Cursor** will not terminate, it remains in stand-by mode. To close the **Remote Cursor**, open the Remote Cursor Context menu (described in the next section) and select the **Close** menu item.

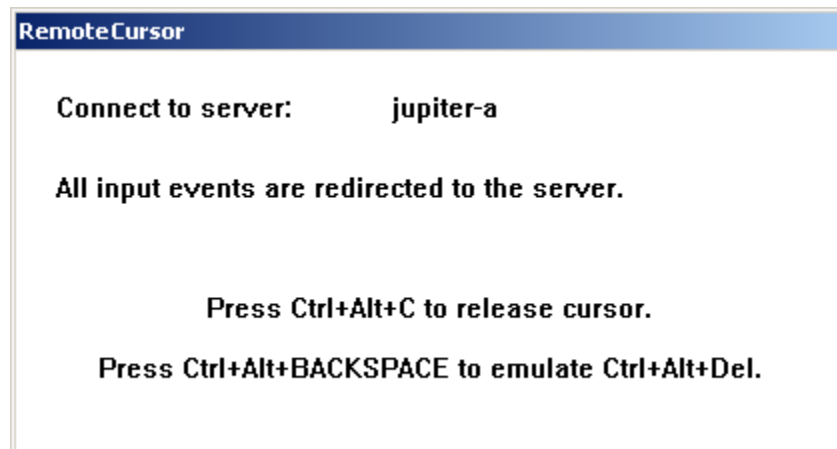


Figure 254 - Remote Cursor Message Dialog

8—Remote Cursor

8.4 Remote Cursor Icon and Context Menu

In standalone mode, **Remote Cursor** will show an icon on the Task Bar as shown below.



Figure 255 - Remote Cursor Icon

Right click on the **Remote Cursor** icon on the Task Bar; the following context menu will be displayed.

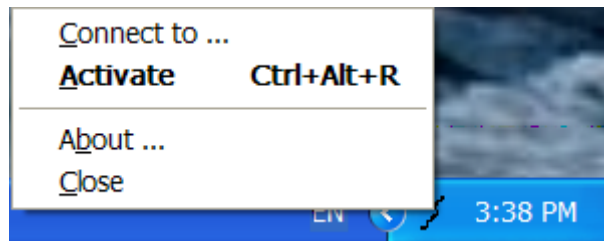


Figure 256 - Remote Cursor Context Menu

Connect to ... To connect to another server. The login dialog will open.

Activate To activate the remote cursor.

About ... Provides version information.

Close To terminate the **Remote Cursor** program.

Remote Cursor Login

8.5 Remote Cursor Login

Remote Cursor is operational even if ControlPoint Server is not yet running on the display wall; this allows you to perform a login into Windows on the display wall controller. To do this, connect to the display wall controller (**File** -> **Connect To...**). If ControlPoint Server is not running you will get an error message, but Remote Cursor will still be operational.

To allow a user to login, **Remote Cursor** opens a login dialog (shown below) where **admin** is the **User Name**. The **Password** field is not presently supported. If the Password is missing, Remote Cursor will try to connect to the server without it. The information needed is the same as that required for the command line activation.

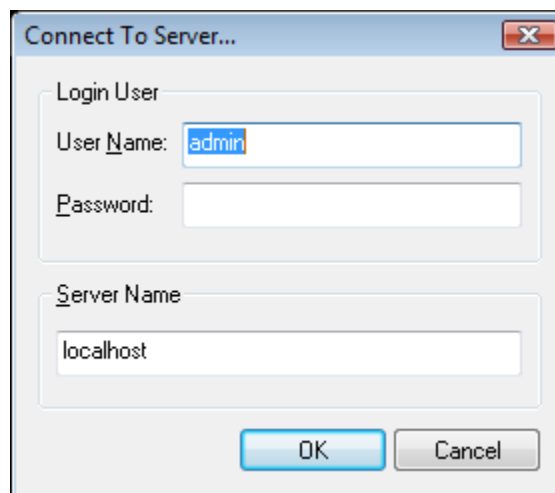


Figure 257 - Remote Cursor Connect Dialog

The Remote Cursor communicates with the server over TCP/IP connection on port 21059. Make sure this port is enabled if a network firewall is used on the server.

8—Remote Cursor

8.6 Multiple Connections

You may have multiple Remote Cursor sessions connected to your server, but you can have only one active at any one time. If you attempt to activate a second Remote Cursor, you will be presented with the dialog box below. If the second Remote Cursor wants to take over the active connection then click Yes. This will disconnect the active Remote Cursor and it will no longer have control of the Display Wall.



Figure 258 - Remote Cursor in Use

Note that this dialog box tells you who (what computer and user name) has the active control. Care must be taken before you take over a connection and kick someone else off to be sure that the active client operator is not in the middle of some critical operation.

Caution Verbal communications may be necessary to insure that proper operation of your system/operation/process is not hampered or a hazard caused by an inopportune take-over during some essential operating sequence. Do NOT arbitrarily take over a server unless you know it is safe to do so!

When an active connection is taken over by another operator, the disconnected station/computer system will be notified that the server has been taken over and by whom it was taken over, with a dialog box similar to the one shown in Figure 230. When the intruding Remote Cursor takes over the wall, the current client gets a message informing him that the other Remote Cursor is taking over.

Features and Limitations



Figure 259 - Remote Cursor Take Over Announcement

8.7 Features and Limitations

- A client can connect to only one server at a time.
- A server can only be activated by only one client.
- Both server and client mice and keyboards can be used at the same time, though this is not generally recommended. This is only to note that the server mouse and keyboard are not locked out when a remote client is connected and Active.
- Pressing the **Windows** key on the client keyboard will return temporary control to the client system. You can also use other Windows HotKeys to return temporary control to the client system. Clicking on the **Remote Cursor** window with the mouse cursor will return control to the Wall Controller.
- You may use the network **name** of a server or its IP address to connect to that server.
- When operational, the cursor will disappear from the client screen until toggled again with the **Ctrl+Alt+C** key combination or temporary control is returned with the use of the **Windows** key (or other Windows HotKeys).
- You **MUST** have TCP/IP set up on your system (refer to the Network Installation section of this manual for procedures). **Remote Cursor** will fail to operate (with no error message) if you do not have TCP/IP installed.
- When emulating Ctrl+Alt+Del on the display wall controller, UAC must be enabled (i.e. set as **On**) on the wall controller.



Chapter 9—Configuring Quad HD Decoder

9. Configuring Quad HD Decoder

9.1 Quad HD Decoder Configuration Dialog

The following are important notes for configuring the Quad HD Decoder:

1. Do not have Quad HD Decoder windows running in ControlPoint when changing decoder settings.
2. Ensure that all cables are plugged-in before starting the system; this ensures that the Quad HD Decoder channels will receive valid IP addresses.
3. When a new Quad HD Decoder window is created, the system acquires the next available Quad HD Decoder channel. A channel is considered available under the following conditions—a valid IP Address defined and the Link Status is up.

9—Configuring Quad HD Decoder

Start up the Quad HD Decoder Configuration application from the start menu:

Start Menu—>Programs—>Jupiter —>ControlPoint—>Quad HD Decoder Config

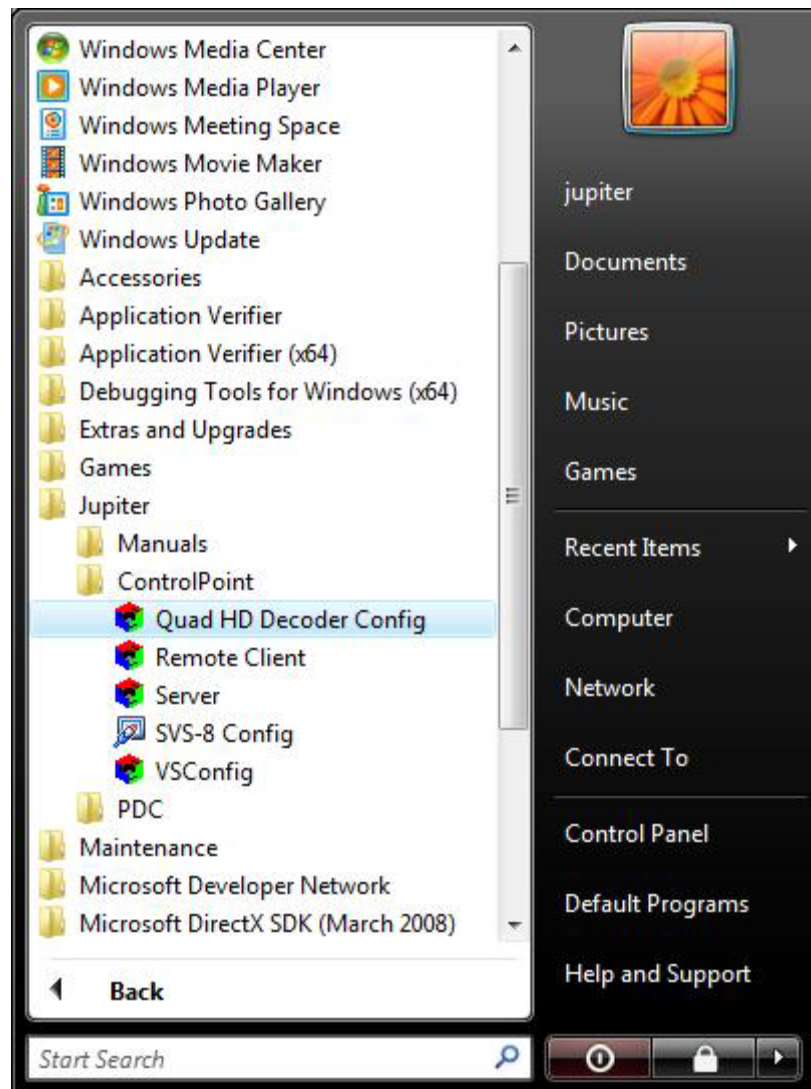


Figure 260 - Quad HD Decoder Configuration—Start Menu

Quad HD Decoder Configuration Dialog

9.1.1 Decoders Tab

The **Quad HD Decoder Configuration** dialog opens to the **Decoders** tab as shown in the following figure:

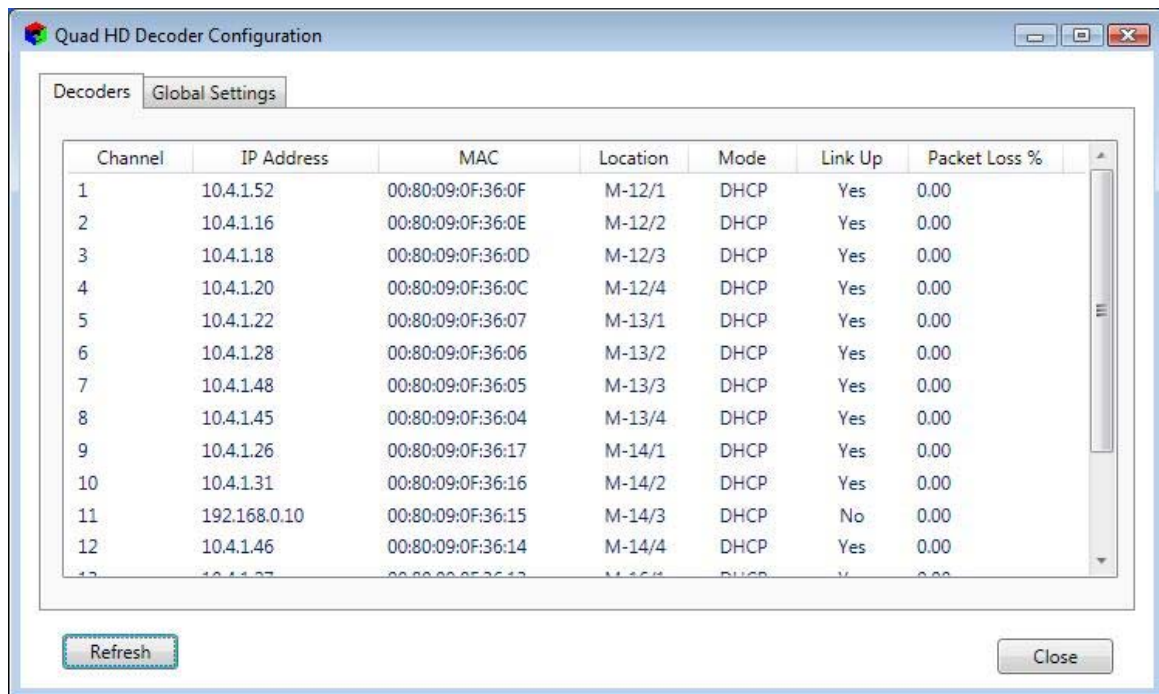


Figure 261 - Quad HD Decoder Configuration Dialog

The **Decoders** tab presents the status of the individual IP decoder channels. The channel information is presented in the following columns:

- **Channel:** Lists the channel number
- **IP Address:** IP address of channel
- **MAC:** Displays the MAC address of the channel
- **Location:** The slot number in each chassis, identifying the decoder card placement. M = Main chassis, A = First Expansion, B = Second Expansion.
- **Mode:** Indicates whether the mode is DHCP or Static.
- **Link Up:** Denotes the link status. This information is only created at system boot. **Yes** indicates proper cable connection. This is the same status as the Link-up LED on the RJ45 of the associated channel.

9—Configuring Quad HD Decoder

- **Packet Loss:** Reports percentage (%) of packet loss for the RTSP/RTP stream types. Calculation is based upon the running total of packet loss detected over the duration of the RTSP/RTP stream play out. Packet loss will cause degradation in decoder performance depending on encoder format and bandwidth utilization. Packet Loss can affect the appearance of the stream.
- Click **Refresh** to update information.

9.1.2 Global Settings Tab

The **Global Settings** tab sets the system-wide settings for all decoder channels. This tab displays the chosen **Video Frame Rate** and **IP Address** mode. Changes made in the **Global Settings** tab affect all the channels.

Depending on the video format of the encoders, select the appropriate frames per second (fps) between 30/60 or 25/50 fps. To change the video frame rate:

1. Click the desired frame rate:
 - 30/60 fps or
 - 25/50 fps
2. Click **Apply** to save and apply the changes. This action resets all the Quad HD Decoder boards in the system.

Quad HD Decoder Configuration Dialog

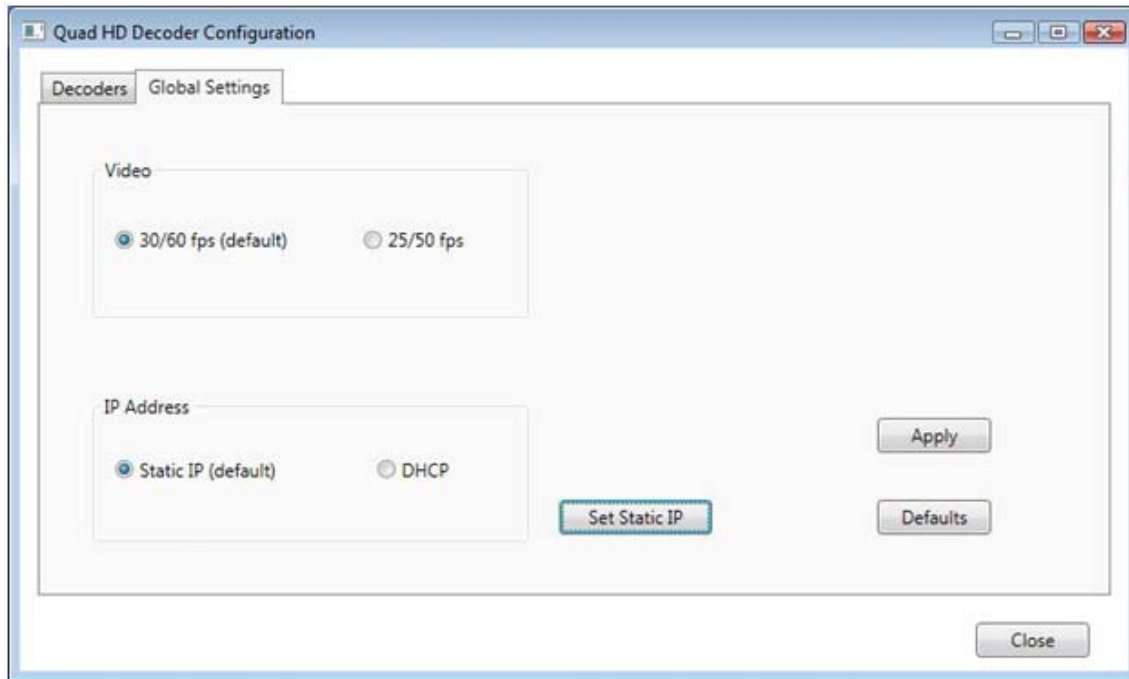


Figure 262 - Global Settings Tab

Selecting the **Static IP** (default) option in the IP Address section sets all decoders to Static IP regardless of individual decoder settings. Refer to ["Network Configuration—Static IP Mode"](#) on page 284 for more information.

Click **Defaults** to reset all the channels to the factory default Video and IP Address settings. Channels can be set individually; however, clicking **Defaults** overrides all of the individual channel settings. Furthermore, using the **Defaults** button sets the IP Address to a specific **Static IP Address: 192.168.0.10** with a **Mask: 255.255.0.0**

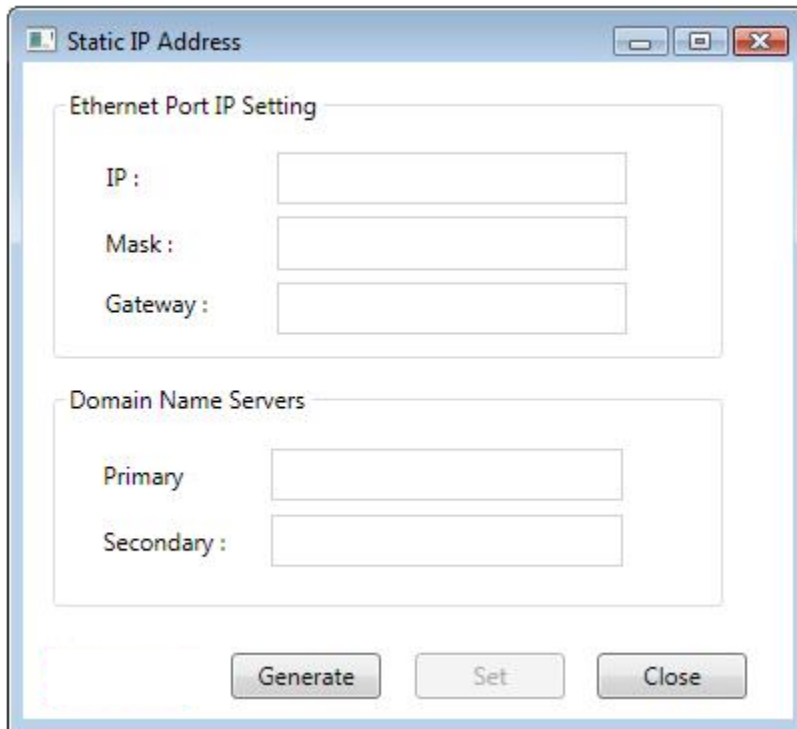
The default selections are:

- **30/60 fps** for **Video** and
- **Static IP** for **IP Address (192.168.0.10** with **Mask:255.255.0.0)**

9—Configuring Quad HD Decoder

The **Set Static IP** button has the following features:

- The button will be enabled when **Static IP (default)** is selected.
- The button will be disabled when **DHCP** is selected.
- Click this button to bring up the **Static IP Address** dialog.



The image shows a Windows-style dialog box titled "Static IP Address". It contains two main sections: "Ethernet Port IP Setting" and "Domain Name Servers". The "Ethernet Port IP Setting" section has three input fields labeled "IP :", "Mask :", and "Gateway :". The "Domain Name Servers" section has two input fields labeled "Primary" and "Secondary :". At the bottom of the dialog, there are three buttons: "Generate", "Set", and "Close".

Figure 263 - Static IP Address Dialog

The **Static IP Address** dialog is used to generate static IP addresses automatically according to the user's input.

Quad HD Decoder Configuration Dialog

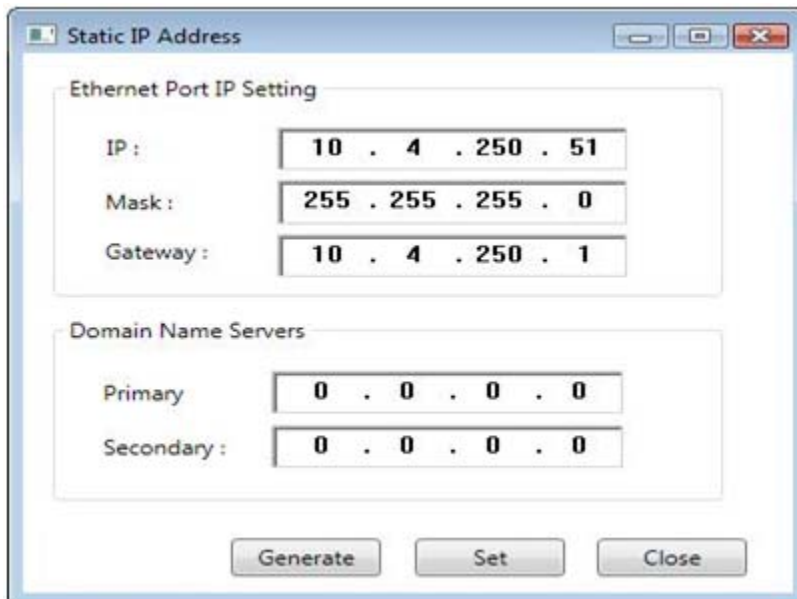
9.1.2.1 Generating Static IP Addresses

Perform the following tasks to automatically generate Static IP Addresses:

1. Enter the starting Static IP information in the following fields:

- IP address
- Mask
- Gateway
- Primary DNS
- Secondary DNS

Click the **Generate** button, to automatically generate the Static IPs for the rest of the channels for all of the QuadHD Decoder cards in the system.



The image shows a Windows-style dialog box titled "Static IP Address". It contains two main sections: "Ethernet Port IP Setting" and "Domain Name Servers". In the "Ethernet Port IP Setting" section, there are three rows: "IP:" with the value "10 . 4 . 250 . 51", "Mask:" with "255 . 255 . 255 . 0", and "Gateway:" with "10 . 4 . 250 . 1". In the "Domain Name Servers" section, there are two rows: "Primary" with "0 . 0 . 0 . 0" and "Secondary:" with "0 . 0 . 0 . 0". At the bottom of the dialog are three buttons: "Generate", "Set", and "Close".

Figure 264 - Generate Static IP Address

2. Click the **Set** button to save the Static IP information.

Note

After you enter the first Static IP information, every subsequent entry will be incremented by 1. For instance, if the first IP was: 10.4.1.250 then the next will be 10.4.1.251 and so on. Once the number reaches 255, the next increment will be: 10.4.2.000.

9—Configuring Quad HD Decoder

If the generated IP is out of network according to the Network Mask, a warning message will be issued.

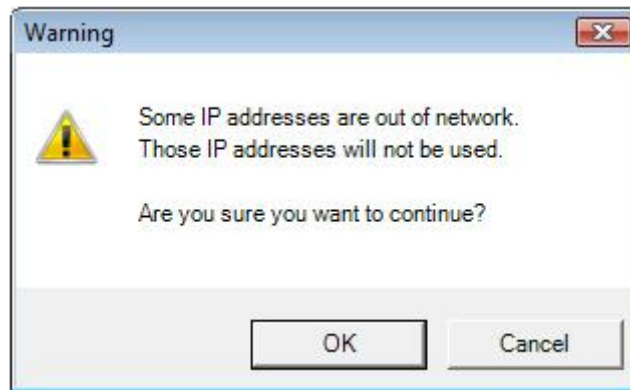


Figure 265 - Warning Message

- Click **Cancel** so that Static IP will not be generated
- Click **OK** so that out-of-network IPs will not be generated

When the **Defaults** button is selected, the following message appears about the factory level reset of the decoders:

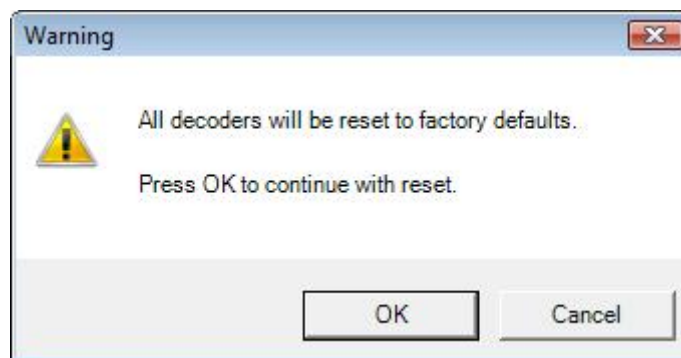


Figure 266 - Factory Reset Confirmation

After clicking **OK**, a progress bar will appear.

Settings Dialog

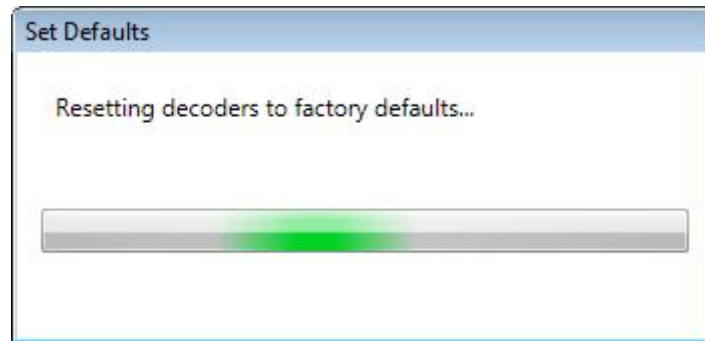


Figure 267 - Factory Default Progress Bar

9.2 Settings Dialog

The **Settings** dialog is for individual decoder channels.

9.2.1 Network Configuration Tab

This tab displays the network configuration of a channel. The changes made in this tab apply to a specific channel. Running **Static IP** mode eliminates potential network problems with DHCP servers and unreliable IP Address allocation.

There are two possible network settings:

- Static IP (the default selection), or
- DHCP

To configure in Static mode:

To set the Static IP mode, perform the following:

1. Select the **Static IP** radio button.
2. Enter valid IP Address, Subnet Mask, Gateway Address, and DNS Addresses. The DNS addresses are optional and can be set to **0**. Enter Primary and/or Secondary Domain Name Server IP Address to resolve Domain Names. Invalid DNS entries will not return an error message or indicate that the entry is invalid. However, these entries (such as, **256.256.256.256**) are ignored by the system.

9—Configuring Quad HD Decoder

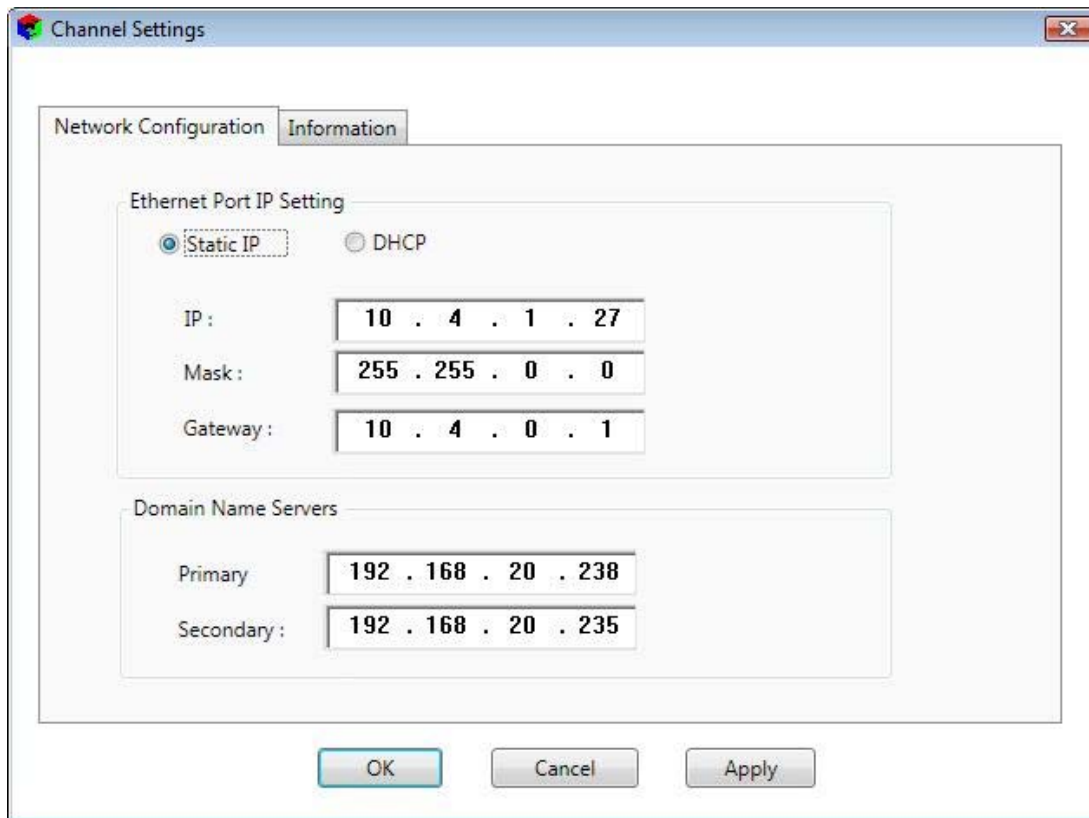


Figure 268 - Network Configuration—Static IP Mode

3. Click **Apply** to save the changes.

The following warning appears when changes are made to the configuration of the Quad HD Decoder channel.

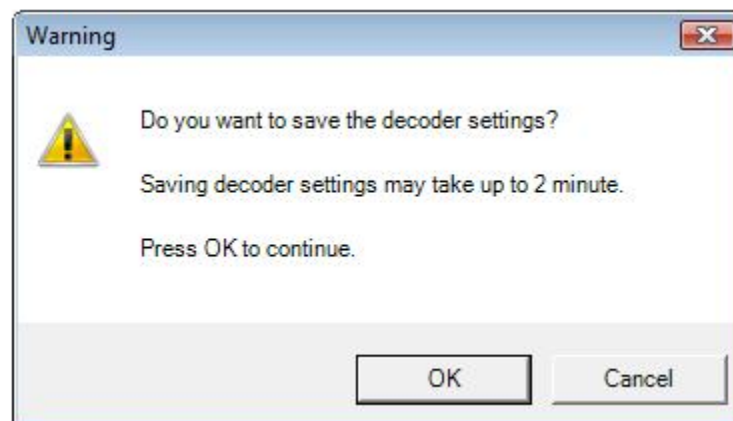


Figure 269 - Quad HD Decoder Reset Confirmation

Settings Dialog

4. Click **OK** to confirm the changes and continue.

A progress bar dialog will appear as follows:

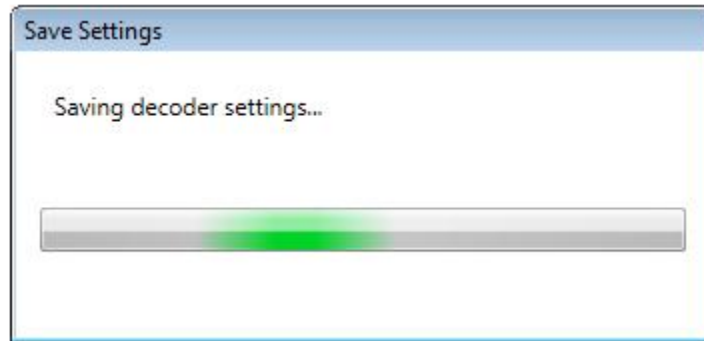


Figure 270 - Progress Bar

Restart the system when all the decoder channels have been set up.

Note	Static settings are saved in the IPDecoder board and not in ControlPoint. This makes troubleshooting easier when information about the settings moves with the board.
-------------	---

9—Configuring Quad HD Decoder

To configure in DHCP mode:

1. Select the **DHCP** radio button.

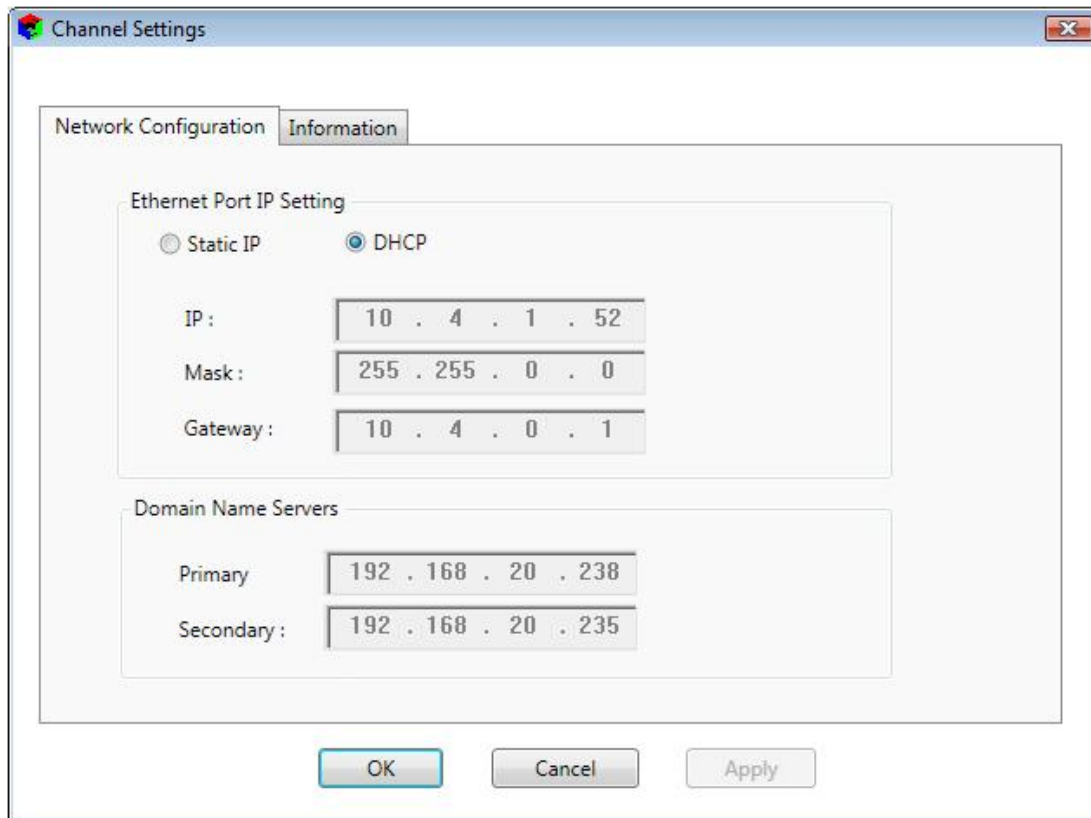


Figure 271 - Network Configuration—DHCP Mode

2. Click **Apply** to save the changes. There is no need to specify **Domain Name Servers (DNS)** since DHCP will automatically determine them.

A progress bar dialog will appear similar to [Figure 267](#).

Caution Quad HD Decoder channels with DHCP enabled negotiate an IP address with the DHCP server during the startup process of the Fusion Catalyst System. If the Quad HD Decoders fail to detect the DHCP server, those channels will be disabled until the next system restart.

Replacing Quad HD Decoder Board

9.3 Replacing Quad HD Decoder Board

When replacing an Quad HD Decoder board, the new board needs to be configured.

Static IP information is stored in the Quad HD Decoder board, not in ControlPoint. Therefore, the replacement board will not automatically inherit this information. Hence, a new board requires the old board's configuration values to be recorded and entered manually.

9.4 Troubleshooting

On Quad HD Decoder Config startup, if a decoder channel does not respond, the following message appears. In such a case, call Jupiter Technical Support.

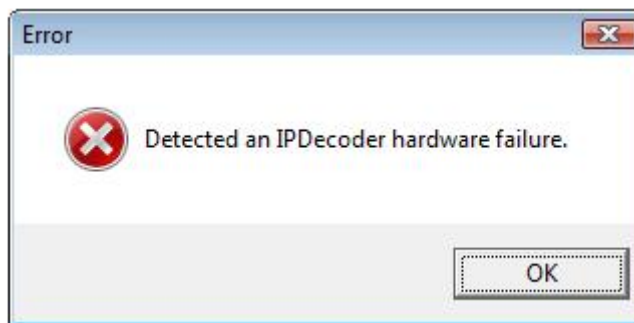


Figure 272 - Hardware Failure Error Message



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